10726680

=> d his

(FILE 'HOME' ENTERED AT 16:46:58 ON 15 FEB 2005)

FILE 'REGISTRY' ENTERED AT 16:47:09 ON 15 FEB 2005
L1 STRUCTURE UPLOADED
L2 2 S L1
L3 STRUCTURE UPLOADED
L4 1 S L3
L5 STRUCTURE UPLOADED
L6 0 S L5

FILE 'CAPLUS' ENTERED AT 17:03:42 ON 15 FEB 2005
E WO 9854181/PN
L7 1 S E3
SELECT L7 1 RN

FILE 'REGISTRY' ENTERED AT 17:04:45 ON 15 FEB 2005
L8 55 S E1-E55
L9 1 S L8 AND C13 H18 N2 . 2 CL H/MF

FILE 'REGISTRY' ENTERED AT 17:07:30 ON 15 FEB 2005
L10 1 S 216853-19-9/RN
SET NOTICE 1 DISPLAY
SET NOTICE LOGIN DISPLAY

FILE 'REGISTRY' ENTERED AT 17:09:46 ON 15 FEB 2005
L11 28079 S 197.56/RID
L12 21 S L3 SUB=L11 SAMPPLE
L13 423 S L3 SSS FULL SUB=L11

FILE 'CAPLUS' ENTERED AT 17:11:51 ON 15 FEB 2005
L14 93 S L13
L15 69 S L14 AND PATENT/DT

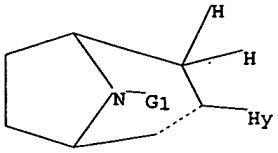
FILE 'REGISTRY' ENTERED AT 17:24:31 ON 15 FEB 2005
L16 0 S L13 AND 3/NR
L17 0 S L13 AND 2/NR
L18 193 S L13 AND 4/NR

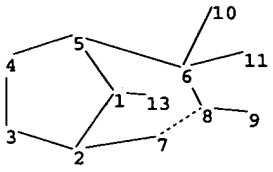
FILE 'CAPLUS' ENTERED AT 17:38:51 ON 15 FEB 2005
L19 53 S L18
L20 40 S L19 AND PATENT/DT
L21 39 S L20 NOT L7
L22 14 S L19 NOT L21
L23 0 S L22 AND PAIN

=>

10726680

Uploading C:\STNEXP4\QUERIES\10726680e.str





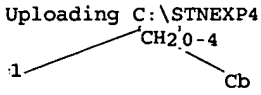
chain nodes :
9 10 11 13
ring nodes :
1 2 3 4 5 6 7 8
chain bonds :
1-13 6-10 6-11 8-9
ring bonds :
1-2 1-5 2-3 2-7 3-4 4-5 5-6 6-8 7-8
exact/norm bonds :
1-2 1-5 1-13 2-3 2-7 3-4 4-5 5-6 6-8 7-8 8-9
exact bonds :
6-10 6-11

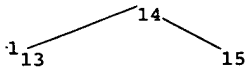
G1:H,CH,Cb

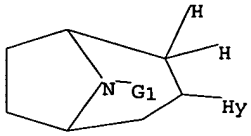
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS
11:CLASS 13:CLASS
Generic attributes :
9:
Saturation : Unsaturated
Number of Carbon Atoms : 7 or more
Type of Ring System : Polycyclic

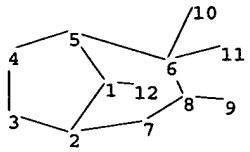
10726680

Uploading C:\STNEXP4\QUERIES\10726680g.str









chain nodes :
9 10 11 12 13 14 15
ring nodes :
1 2 3 4 5 6 7 8
chain bonds :
1-12 6-10 6-11 8-9 13-14 14-15
ring bonds :
1-2 1-5 2-3 2-7 3-4 4-5 5-6 6-8 7-8
exact/norm bonds :
1-2 1-5 1-12 2-3 2-7 3-4 4-5 5-6 6-8 7-8 8-9
exact bonds :
6-10 6-11 13-14 14-15

G1:H,Cb,CH3,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,[*1]

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:Atom
Generic attributes :
9:
Saturation : Unsaturated
Number of Carbon Atoms : 7 or more
Type of Ring System : Polycyclic

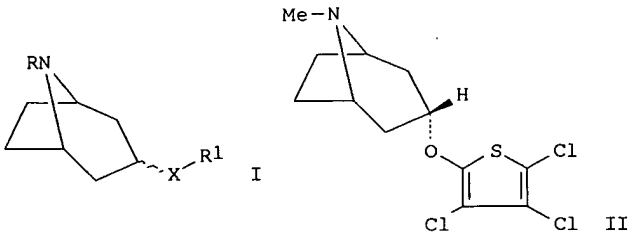
10726680

=> d bib abs hitstr

L21 ANSWER 1 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:1154707 CAPLUS
DN 142:94018
TI Preparation of novel 8-azabicyclo[3.2.1]octane derivatives for use in pharmaceutical compositions as monoamine neurotransmitter re-uptake inhibitors
IN Peters, Dan; Eriksen, Birgitte L.; Nielsen, Elsebet Ostergaard; Scheel-Krueger, Jorgen; Olsen, Gunnar M.
PA Neurosearch A/S, Den.
SO PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004113334	A1	20041229	WO 2004-EP51167	20040618
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI DK 2003-939	A	20030624		
US 2003-482566P	P	20030626		
DK 2003-1487	A	20031009		
US 2003-509808P	P	20031010		
DK 2004-228	A	20040213		
US 2004-544210P	P	20040213		

GI

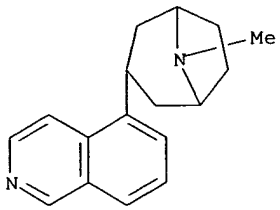


AB 8-Azabicyclo[3.2.1]octane derivs. of tropine and pseudotropine, such as I [R = H, alkyl; R1 = aryl, heteroaryl; X = O, S, NR3; R3 = H, alkyl, acyl, sulfonyl, etc.], were prepared for therapeutic use in the treatment of diseases, disorders or conditions responsive to inhibition of monoamine neurotransmitter reuptake in the central nervous system (CNS). The CNS disorders claimed for treatment include mood disorder, depression, atypical depression, major depressive disorder, dysthymic disorder, bipolar disorder, bipolar I disorder, bipolar II disorder, cyclothymic disorder, mood disorder due to a general medical condition, substance-induced mood disorder, pseudodementia, Ganser's syndrome, obsessive compulsive disorder, panic disorder, panic disorder without agoraphobia, panic disorder with agoraphobia, agoraphobia without history of panic disorder, panic attack, memory deficits, memory loss, attention deficit hyperactivity disorder, obesity, anxiety, generalized anxiety disorder, eating disorder, Parkinson's disease, parkinsonism, dementia, dementia of ageing, senile dementia, Alzheimer's disease, acquired immunodeficiency syndrome dementia complex, memory dysfunction in ageing, specific phobia, social phobia, posttraumatic stress disorder, acute stress disorder, drug addiction, drug misuse, cocaine abuse, nicotine abuse, tobacco abuse and alcoholism. Further, the CNS disorders claimed for treatment include pain, chronic pain, inflammatory pain, neuropathic pain, migraine pain, tension-type headache, chronic tension-type headache, pain associated with depression, fibromyalgia, arthritis, osteoarthritis,

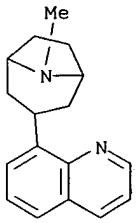
rheumatoid arthritis, back pain, cancer pain, irritable bowel pain, irritable bowel syndrome, postoperative pain, post-stroke pain, drug-induced neuropathy, diabetic neuropathy, sympathetically-maintained pain, trigeminal neuralgia, dental pain, myofacial pain, phantom-limb pain, bulimia, premenstrual syndrome, late luteal phase syndrome, posttraumatic syndrome, chronic fatigue syndrome, urinary incontinence, stress incontinence, urge incontinence, nocturnal incontinence, sexual dysfunction, premature ejaculation, erectile difficulty, erectile dysfunction, eating disorders, anorexia nervosa, sleep disorders, autism, mutism, trichotillomania, narcolepsy, post-stroke depression, stroke-induced brain damage, stroke-induced neuronal damage or Gilles de la Tourette's disease. Thus, endo-8-azabicyclo[3.2.1]octane derivative II was prepared in 33% yield by reacting tropine with tetrahydrothiophene using t-BuOK and 18-crown-6 ether in DMF. Dosages and pharmaceutical compns. of these 8-azabicyclo[3.2.1]octanes were discussed.

IT **817199-89-6P**, exo-3-(Isoquinolin-5-yl)-8-methyl-8-azabicyclo[3.2.1]octane **817199-97-6P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(claimed compound; preparation of novel 8-azabicyclo[3.2.1]octane tropine or pseudotropine derivs. for use in pharmaceutical compns. as monoamine neurotransmitter re-uptake inhibitors)

RN 817199-89-6 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(5-isoquinolinyl)-8-methyl-, (3-exo)- (9CI) (CA INDEX NAME)



RN 817199-97-6 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 8-methyl-3-(8-quinolinyl)-, (3-exo)- (9CI) (CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 2-39 bib abs hitstr

L21 ANSWER 2 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:996153 CAPLUS
DN 141:424115
TI Preparation of N-phenylalkyl piperidines and 8-azabicyclo[3.2.1]octanes as CCR5 receptor modulators
IN Cumming, John; Faull, Alan
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 70 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	WO 2004099178	A1	20041118	WO 2004-SE697	20040506

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI SE 2003-1369 A 20030509

OS MARPAT 141:424115

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [wherein A = absent, CH2CH2; R1 = halo, OH, NO2, CN, alkyl, alkoxy, (CH2)nSO0-2-alkyl, (un)substituted (CH2)nSO2NH2, NH2, CONH2, Ph, heteroaryl, ureido, etc.; R2 = (halo)phenyl; (halo)thienyl; R3 = H, Me; R4 = (un)substituted heterocyclyl; n = 0-2; and pharmaceutically acceptable salts or solvates thereof] were prepared as chemokine CCR5 receptor modulators. For example, (R)-3-(3-fluorophenyl)-3-(4-methanesulfonylphenyl)propionaldehyde was coupled with 5-methanesulfonyl-1-(piperidin-4-yl)-1H-benzimidazole in the presence of sodium trisacetoxyborohydride and AcOH in CH2Cl2 to give II. The latter inhibited binding of MIP-1α to recombinant human CCR5 receptors expressed in membranes prepared from Chinese hamster ovary cells with a Pic50 (i.e., the neg. log of the IC50 value) of 9.0. Thus, I and pharmaceutical compns. comprising them are useful for treating a CCR5 mediated diseases, such as autoimmune and inflammatory disorders (no data).

IT **795310-55-3P 796072-68-9P**

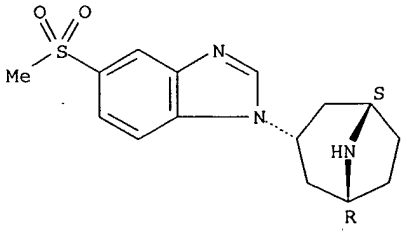
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of N-phenylalkyl piperidines and azabicyclo[3.2.1]octanes as CCR5 receptor modulators for treatment of autoimmune and inflammatory disorders)

RN 795310-55-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane, 3-[5-(methylsulfonyl)-1H-benzimidazol-1-yl]-, (3-endo)- (9CI) (CA INDEX NAME)

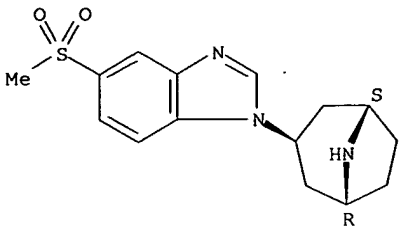
Relative stereochemistry.



RN 796072-68-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane, 3-[5-(methylsulfonyl)-1H-benzimidazol-1-yl]-, (3-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



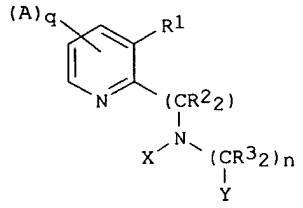
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 3 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:878165 CAPLUS
DN 141:379809
TI Preparation of pyridine derivatives as CXCR4 chemokine receptor binding compounds
IN Bridger, Gary; McEachern, Ernest J.; Skerlj, Renato; Schols, Dominique
PA USA
SO U.S. Pat. Appl. Publ., 211 pp.
CODEN: USXXCO
DT **Patent**
LA English
FAN.CNT 1

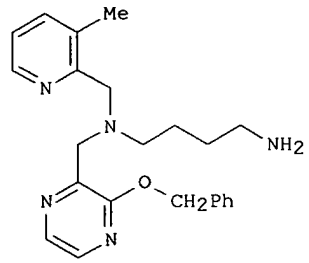
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004209921	A1	20041021	US 2004-823494	20040412
WO 2004091518	A2	20041028	WO 2004-US11328	20040412
WO 2004091518	A3	20041223		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2003-462736P P 20030411
US 2003-505688P P 20030923
OS MARPAT 141:379809
GI



I



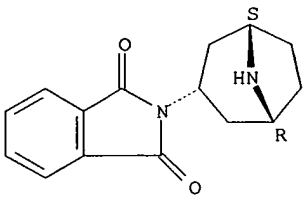
II

AB Title compds. I [X = (CR32)o-(CR3=CR3)p-(CR32)r-NR52, (CR32)s-R4, (un)substituted mono or bicyclic ring optionally containing N, O or S, etc.; Y = (un)substituted N-containing monocyclic or bicyclic aromatic or partially aromatic moiety; A and R1 = non-interfering substituent provided that two As do not form a ring; R2 and R3 = H or (un)substituted alkyl; R4 = (un)substituted heterocycle or a hetero compound; R5 = H or alkyl; wherein R1 and R2 is not H; and wherein R1 and R2 may be connected to form an addnl. ring if Y does not contain a 2-imidazoyl residue optionally connected to an addnl. ring; q and n independently = 0-4; p = 0-1; o and r independently = 1-4; s = 1-6 provided that if X = (CR3)2-R4, r is at least two if R4 = 2-pyridinyl, quinolinyl, imidazolyl or furan], as well as their pharmaceutically acceptable salts, are prepared and disclosed as having the ability to bind to chemokine receptors, in particular CXCR4. Thus, e.g., II was prepared by reductive amination of {4-[(3-methylpyridin-2-ylmethyl)-amino]-butyl}carbamic acid tert-Bu ester (preparation given) with 3-benzyloxypyrazine-2-carbaldehyde. The present invention also relates to methods of using such compds., such as in treating HIV infection and inflammatory conditions such as rheumatoid arthritis. In assays to evaluate inhibition of HIV-1, many compds. of the invention exhibited IC50 values in the range of 0.5nM-5μM. Furthermore, the present invention relates to methods to elevate progenitor and stem cell counts, as well as methods to elevate white blood cell counts, using such compds.

IT **780803-54-5P 781629-88-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of pyridine derivs. as CXCR4 chemokine receptor binding compds.)

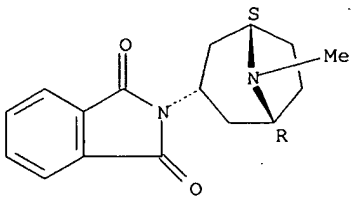
RN 780803-54-5 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 2-(3-endo)-8-azabicyclo[3.2.1]oct-3-yl- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 781629-88-7 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 2-[(3-endo)-8-methyl-8-azabicyclo[3.2.1]oct-3-yl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L21 ANSWER 4 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:534200 CAPLUS
DN 141:88928
TI Preparation of indane compounds and analogs as CCR5 antagonists
IN Youngman, Michael; Kazmierski, Wieslaw Mieczyslaw; Yang, Hanbiao; Aquino, Christopher Joseph
PA Smithkline Beecham Corporation, USA
SO PCT Int. Appl., 129 pp.
CODEN: PIXXD2
DT **Patent**

10726680

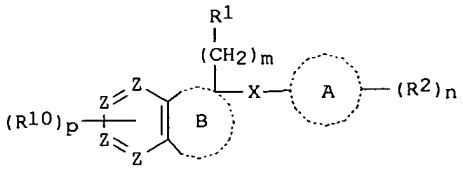
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004055012	A1	20040701	WO 2003-US39975	20031212

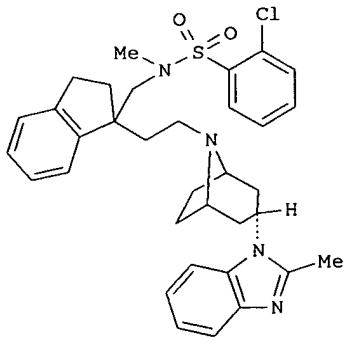
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2002-433378P P 20021213
OS MARPAT 141:88928
GI



I



II

AB Title compds. I [R1 = (un)substituted saturated, partially saturated, or aromatic 4-7 monocyclic or 8-10 membered bicyclic ring having one ring N and 0-4 addnl. heteroatoms selected from O, P, S or N, optionally attached through alkylene chain, (un)substituted-amide, etc.; R2 = OH, (un)substituted-alkyl, -alkoxy, -heteroaryl, etc., optionally two adjacent R2s taken together form a fused, saturated, partially saturated or aromatic 5-6 membered ring having 0-3 heteroatoms selected from O, P, S, or N, or two geminal R2s optionally taken together from a spiro, saturated, partially saturated or aromatic 5-6 membered ring having 0-3 heteroatoms selected from O, P, S or N, said fused or spiro ring being optionally substituted; R10 = H, halo, F3C, (un)substituted-aryl, etc., or two R10s may together form a 3-7 membered saturated, partially saturated, or aromatic carbocyclic ring, optionally containing one or more heteroatom selected from O, P, N, or S that is fused to depicted ring; X = (un)substituted-alkylene chain which optionally may have 0-3 heteroatoms selected from O, P, S or N; A = saturated, partially saturated, or aromatic 3-7 monocyclic or 8-10 membered bicyclic ring having one ring nitrogen and 0-4 addnl. heteroatoms selected from O, P, S or N ; B = 4-7 membered saturated, partially saturated, or aromatic carbocyclic ring optionally containing 1-2 heteroatoms selected from O, P, S, or N; each Z maybe C or N (at least one Z = C) ; m = 1-3, n = 0-5, p = 0-4] and their pharmaceutically acceptable salts are prepared and disclosed as CCR5 antagonists. Thus, II was prepared by reaction of N-methyl(1-{2-[(1R,5S)-3-(2-methyl-1H-benzimidazol-1-yl)-8-azabicyclo[3.2.1]oct-8-yl]ethyl}-2,3-dihydro-1H-inden-1-yl)methanamine (preparation given) with 2-chlorophenylsulfonyl chloride. A preparative example utilizing

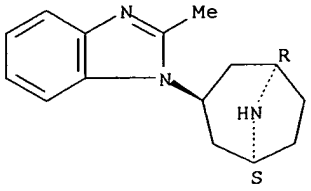
combinatorial methods of synthesis is provided. I have pIC50 values of ≥5 in assays for CCR5 antagonism. As CCR5 antagonists, I are useful for the treatment of viral infections (particularly HIV infection).

IT **478696-46-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of indane compds. and analogs as CCR5 antagonists)

RN 478696-46-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane, 3-(2-methyl-1H-benzimidazol-1-yl)-, (3-endo)-(9CI) (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

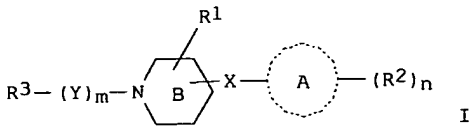
L21 ANSWER 5 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:534199 CAPLUS
DN 141:89094
TI Preparation of oxazine and morpholine derivatives as CCR5 antagonists
IN Aquino, Christopher Joseph; Chong, Pek Yong; Duan, Maosheng; Kazmierski, Wieslaw Mieczyslaw
PA Smithkline Beecham Corporation, USA
SO PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004055011	A1	20040701	WO 2003-US39740	20031212

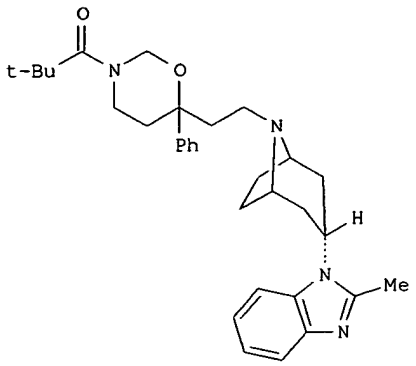
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2002-433410P P 20021213
OS MARPAT 141:89094
GI



I



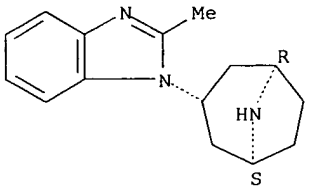
II

AB Title compds. I [R1 = (un)substituted-alkyl, -alkenyl, -alkynyl, -cycloalkyl, etc., or R1 and X taken together from a saturated, partially saturated, or aromatic 5-6 membered ring having 0-3 heteroatoms selected from O, P, S or N fused to ring A; R2 = OH, halo, (un)substituted-alkyl, -alkynyl, -heteroaryl, etc., optionally two adjacent R2s taken together form a fused, saturated, partially saturated or aromatic 5-6 membered ring having 0-3 heteroatoms selected from O, P, S, or N, or two geminal R2s optionally taken together from a (un)substituted spiro, saturated, partially saturated or aromatic 5-6 membered ring having 0-3 heteroatoms selected from O, P, S or N, said fused or spiro ring being optionally substituted; X = (un)substituted-alkylene chain which optionally may have 0-3 heteroatoms selected from O, P, S or N; A = saturated, partially saturated, or aromatic 3-7 monocyclic or 8-10 membered bicyclic ring having one ring nitrogen and 0-4 addnl. heteroatoms selected from O, P, S or N ; Ring B contains an oxygen atom in addition to depicted N; R3 = H, amine, CF3, halo, (un)substituted alkyl, etc., Y = alkyl, alkenyl, alkynyl, carbonyl, thiocarbonyl, etc.; m = 0-1, n = 0-5] and their pharmaceutically acceptable salts are prepared and disclosed as CCR5 antagonists. Thus, II was prepared by reaction of [3-(2,2-dimethylpropanoyl)-6-phenyl-1,3-oxazinan-6-yl]acetaldehyde (preparation given) with 1-[(1R,5S)-8-azabicyclo[3.2.1]oct-3-yl]-2-methyl-1H-benzimidazole dihydrochloride. I have pIC50 values of ≥5 in assays for CCR5 antagonism. As CCR5 antagonists, I are useful for the treatment of viral infections (particularly HIV infection).

IT **280762-26-7 280768-46-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of oxazine and morpholine derivs. as CCR5 antagonists)

RN 280762-26-7 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-methyl-1H-benzimidazol-1-yl)-, (3-exo)- (9CI) (CA INDEX NAME)

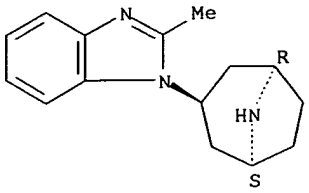
Relative stereochemistry.



RN 280768-46-9 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-methyl-1H-benzimidazol-1-yl)-, dihydrochloride, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

10726680



●2 HCl

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

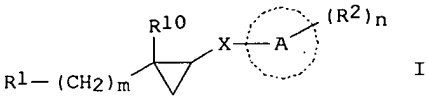
L21 ANSWER 6 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:534198 CAPLUS
DN 141:88871
TI Preparation of aminoalkylaryl cyclopropyl compounds as CCR5 antagonists
IN Peckham, Jennifer Poole; Aquino, Christopher Joseph; Kazmierski, Wieslaw Mieczyslaw
PA Smithkline Beecham Corporation, USA
SO PCT Int. Appl., 138 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004055010	A2	20040701	WO 2003-US39619	20031212
WO 2004055010	A3	20041223		

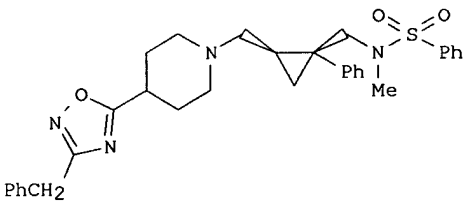
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2002-433626P P 20021213
OS MARPAT 141:88871
GI



I



II

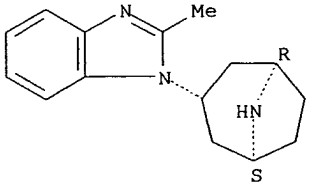
AB Title compds. I [R1 = (un)substituted saturated, partially saturated, or aromatic 4-7 monocyclic or 8-10 membered bicyclic ring having one ring nitrogen and 0-4 addnl. heteroatoms selected from O, P, S or N, optionally attached through

alkylene chain, substituted-amine, -amide, etc.; R2 = OH, halogen (un)substituted-alkyl, -alkoxy, -aryl, -heteroaryl, -cycloalkyl, etc., optionally two adjacent R2s taken together form a fused, saturated, partially saturated or aromatic 5-6 membered ring having 0-3 heteroatoms selected from O, P, S, or N, or two geminal R2s optionally taken together from a spiro, saturated, partially saturated or aromatic 5-6 membered ring having 0-3 heteroatoms selected from O, P, S or N, said fused or spiro ring being optionally substituted; R10 = H, (un)substituted-alkyl, -alkenyl, -alkynyl, -cycloalkyl, -heterocyclyl, -heteroaryl, or aryl; X = (un)substituted-alkylene chain which optionally may have 0-3 heteroatoms selected from O, P, S or N; A = saturated, partially saturated, or aromatic 3-7 monocyclic or 8-10 membered bicyclic ring having one ring nitrogen and 0-4 addnl. heteroatoms selected from O, P, S or N ; m = 0-3, n = 0-5] and their pharmaceutically acceptable salts are prepared and disclosed as CCR5 antagonists. Thus, II was prepared by reaction of N-{[(1S,2R)-2-formyl-1-phenylcyclopropyl]methyl}-N-methylbenzenesulfonamide (preparation given) and 4-(3-benzyl-1,2,4-oxadiazol-5-yl)piperidine. Addnl. preparative examples utilizing combinatorial methods of synthesis are given. I have pIC50 values of ≥5 in assays for CCR5 antagonism. As CCR5 antagonists, I are useful for the treatment of viral infections (particularly HIV infection).

IT **280762-26-7 478696-46-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of aminoalkylaryl cyclopropane derivs. as CCR5 antagonists)

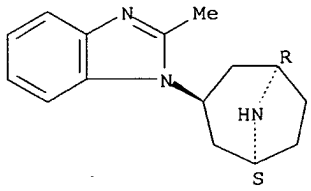
RN 280762-26-7 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-methyl-1H-benzimidazol-1-yl)-, (3-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 478696-46-7 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-methyl-1H-benzimidazol-1-yl)-, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L21 ANSWER 7 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:534173 CAPLUS
DN 141:89016
TI Preparation of benzimidazolylazabicyclooctylethylpiperidines as Ccr5 antagonists for the treatment of HIV infection
IN Kazmierski, Wieslaw Mieczyslaw; Aquino, Christopher Joseph; Bifulco, Neil; Boros, Eric Eugene; Chauder, Brian Andrew; Chong, Pek Yoke; Duan, Maosheng; Deanda, Felix, Jr.; Koble, Cecilia Suarez; Mclean, Ed Williams; Peckham, Jennifer Poole; Perkins, Angilique C.; Thompson, James Benjamin; Vanderwall, Dana
PA Smithkline Beecham Corporation, USA; et al.
SO PCT Int. Appl., 859 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

10726680

PI WO 2004054974 A2 20040701 WO 2003-US39644 20031212
WO 2004054974 A3 20040902
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2002-433634P P 20021213
OS MARPAT 141:89016
GI

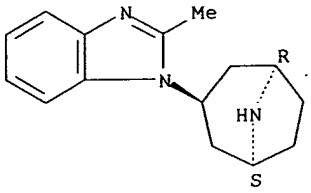
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Compds. I [R1 = (optionally substituted) alkyl, aryl, heteroaryl, carbocyclyl; R2 = H, (optionally substituted) alkyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, aralkyl, heteroarylalkyl, heteroarylcycloalkyl, aralkylcarbonyl, heteroarylsulfinyl; R3 = H, halo, cyano, trifluoromethyl, (optionally substituted) amino, acylamino, alkyl; X = C1-5 alkylene, optionally substituted with oxo or thioxo groups or halogen atoms, and optionally containing 1-3 oxygen, nitrogen, sulfur, or phosphorus atoms; Y = carbonyl, thiocarbonyl, 1,2-dioxoethylene, oxyalkylcarbonyl, sulfinyl, sulfonyl, oxycyanoimino, (optionally substituted) aminocarbonyl, carbonylamino, aminothiocarbonyl, oxyiminomethyl, thioiminomethyl, amino(cyanoimino)methyl, (cyanoimino)methyl, amino(acylimino)methyl, amino(sulfonylimino)methyl, amino(sulfinylimino)methyl, amino(alkoxyimino)methyl, amino(imino)methyl, (cyanoimino)methoxy, iminomethoxy, (cyanoimino)methanethiyl, alkylcarbonyloxy; A = saturated, partially saturated, or aromatic monocyclic ring with 5-6 atoms or a bicyclic ring with 8-10 members containing 0-5 nitrogen, oxygen, and/or sulfur atoms] such as II are prepared I are prepared as Ccr5 antagonists for the treatment of viral infections, (particularly HIV infection), related syndromes such as AIDS-related complex (ARC), progressive generalized lymphadenopathy, Kaposi's sarcoma, and neurol. conditions, and other diseases such as multiple sclerosis, rheumatoid arthritis, Crohn's disease, and immune-mediated disorders. The invention compds. have pIC50 values of ≥5 in assays for Ccr5 antagonism. Piperidineacetaldehyde III is prepared in four steps from 4-phenyl-4-piperidinecarbonitrile by protection of the piperidine with Boc anhydride, reduction of the nitrile with diisobutylaluminum hydride, Wittig olefination with methoxymethylphosphonium chloride, and hydrolysis of the enol ether with catalytic p-toluenesulfonic acid monohydrate. The hydrochloride of endo-(benzimidazolyl)azabicyclooctane IV is prepared in five steps from tert-Bu endo-3-oxo-8-azabicyclo[3.2.1]octane-8-carboxylate; reductive amination with benzylamine, reductive cleavage of the benzyl group by palladium-mediated hydrogenation, a nucleophilic aryl substitution reaction with 1-fluoro-2-nitrobenzene, reduction of the nitro group by hydrogenation over palladium on carbon, and treatment with tri-Et orthoacetate followed by treatment with hydrochloric acid in ethanol. Coupling of III and IV by reductive amination with sodium triacetoxyborohydride, cleavage of the Boc group with hydrochloric acid in dioxane, and acylation with pivaloyl chloride and triethylamine yields II.

IT **280768-46-9P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate; preparation of benzimidazolylazabicyclooctylethylpiperidine Ccr5 antagonists in the treatment of bacterial and viral infections and other diseases)

RN 280768-46-9 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-methyl-1H-benzimidazol-1-yl)-, dihydrochloride, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

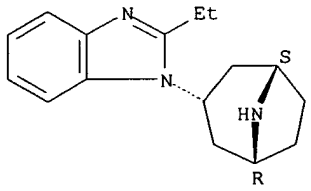


●2 HCl

IT **716358-82-6P 716358-84-8P 716358-85-9P**
716358-86-0P 716358-88-2P 716358-89-3P
716358-90-6P 716358-91-7P 716358-94-0P
716358-96-2P 716359-04-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of benzimidazolylazabicyclooctylethylpiperidine Ccr5 antagonists in the treatment of bacterial and viral infections and other diseases)

RN 716358-82-6 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-ethyl-1H-benzimidazol-1-yl)-, monohydrochloride, (3-endo)- (9CI) (CA INDEX NAME)

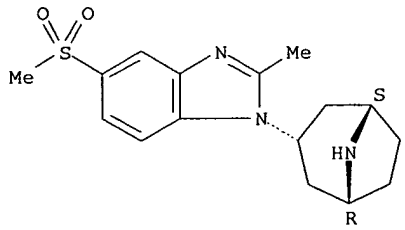
Relative stereochemistry.



● HCl

RN 716358-84-8 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-[2-methyl-5-(methylsulfonyl)-1H-benzimidazol-1-yl]-, dihydrochloride, (3-endo)- (9CI) (CA INDEX NAME)

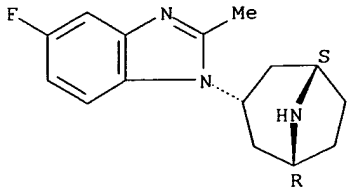
Relative stereochemistry.



●2 HCl

RN 716358-85-9 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(5-fluoro-2-methyl-1H-benzimidazol-1-yl)-, dihydrochloride, (3-endo)- (9CI) (CA INDEX NAME)

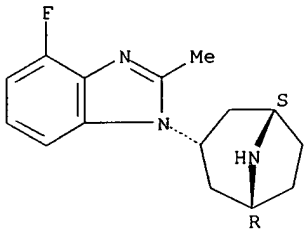
Relative stereochemistry.



● 2 HCl

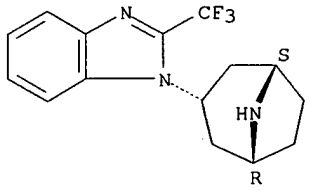
RN 716358-86-0 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(4-fluoro-2-methyl-1H-benzimidazol-1-yl)-, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 716358-88-2 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-[2-(trifluoromethyl)-1H-benzimidazol-1-yl]-, monohydrochloride, (3-endo)- (9CI) (CA INDEX NAME)

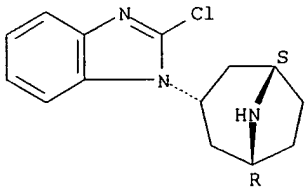
Relative stereochemistry.



● HCl

RN 716358-89-3 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-chloro-1H-benzimidazol-1-yl)-, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



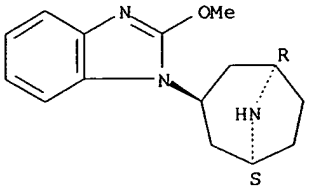
RN 716358-90-6 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-methoxy-1H-benzimidazol-1-yl)-, (3-endo)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

10726680

CM 1

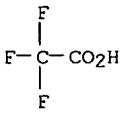
CRN 714968-54-4
CMF C15 H19 N3 O

Relative stereochemistry.



CM 2

CRN 76-05-1
CMF C2 H F3 O2

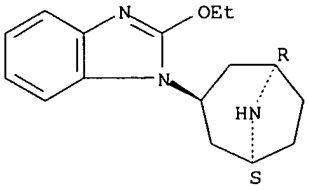


RN 716358-91-7 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-ethoxy-1H-benzimidazol-1-yl)-, (3-endo)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

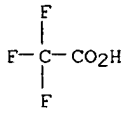
CRN 714968-68-0
CMF C16 H21 N3 O

Relative stereochemistry.



CM 2

CRN 76-05-1
CMF C2 H F3 O2

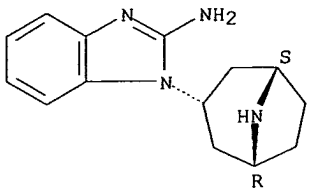


RN 716358-94-0 CAPLUS
CN 1H-Benzimidazol-2-amine, 1-(3-endo)-8-azabicyclo[3.2.1]oct-3-yl-, rel-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

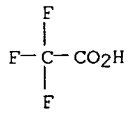
CRN 716358-93-9
CMF C14 H18 N4

Relative stereochemistry.



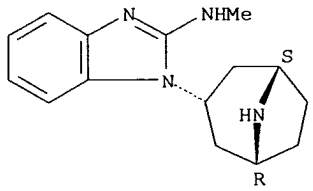
CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 716358-96-2 CAPLUS
CN 1H-Benzimidazol-2-amine, 1-(3-endo)-8-azabicyclo[3.2.1]oct-3-yl-N-methyl-, dihydrochloride (9CI) (CA INDEX NAME)

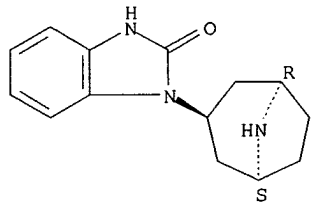
Relative stereochemistry.



●2 HCl

RN 716359-04-5 CAPLUS
CN 2H-Benzimidazol-2-one, 1-(3-endo)-8-azabicyclo[3.2.1]oct-3-yl-1,3-dihydro-, monohydrochloride (9CI) (CA INDEX NAME)

Relative stereochemistry.

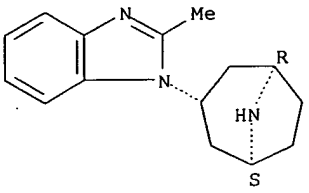


● HCl

IT **280762-26-7 280762-27-8**
RL: RCT (Reactant); RACT (Reactant or reagent)

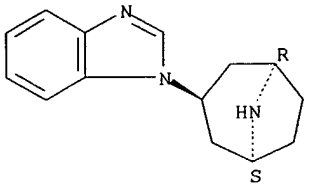
(starting material; preparation of benzimidazolylazabicyclooctylethylpiperid
ine Ccr5 antagonists in the treatment of bacterial and viral infections
and other diseases)
RN 280762-26-7 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-methyl-1H-benzimidazol-1-yl)-, (3-exo)-
(9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 280762-27-8 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1H-benzimidazol-1-yl)-, (3-endo)- (9CI) (CA
INDEX NAME)

Relative stereochemistry.

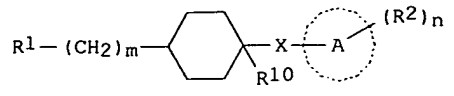


L21 ANSWER 8 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:531360 CAPLUS
DN 141:88873
TI Preparation of heterocyclylalkyl substituted cyclohexyl compounds as CCR5
antagonists
IN Duan, Maosheng; Kazmierski, Wieslaw Mieczyslaw; Aquino, Christopher Joseph
PA Smithkline Beecham Corporation, USA
SO PCT Int. Appl., 103 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

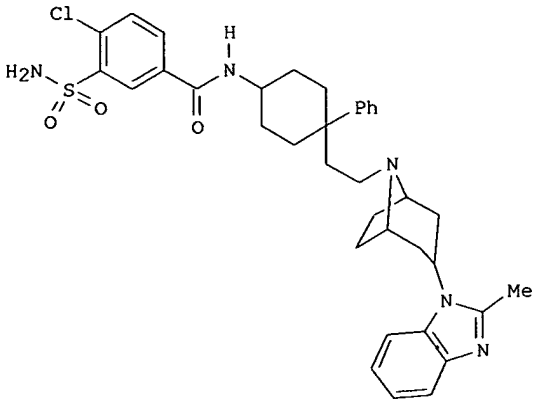
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004054581	A2	20040701	WO 2003-US39732	20031212

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2002-433552P P 20021213
OS MARPAT 141:88873
GI



I



II

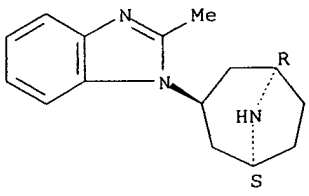
AB Title compds. I [R1 = (un)substituted saturated, partially saturated, or aromatic 4-7 monocyclic or 8-10 membered bicyclic ring having one ring nitrogen and 0-4 addnl. heteroatoms selected from O, P, S or N, optionally attached through alkylene chain, substituted-amine, -amide, etc.; R2 = OH, halogen (un)substituted-alkyl, -alkoxy, -aryl, -heteroaryl, -cycloalkyl, etc., optionally two adjacent R2s taken together form a fused, saturated, partially saturated or aromatic 5-6 membered ring having 0-3 heteroatoms selected from O, P, S, or N, or two geminal R2s optionally taken together from a spiro, saturated, partially saturated or aromatic 5-6 membered ring having 0-3 heteroatoms selected from O, P, S or N, said fused or spiro ring being optionally substituted; R10 = H,(un)substituted-alkyl, -alkenyl, -alkynyl, -cycloalkyl, -heterocyclyl, -heteroaryl, or aryl; X = (un)substituted-alkylene chain which optionally may have 0-3 heteroatoms selected from O, P, S or N; A = saturated, partially saturated, or aromatic 4-7 monocyclic or 8-10 membered bicyclic ring having one ring nitrogen and 0-4 addnl. heteroatoms selected from O, P, S or N ; m = 0 or 1, n = 0-5] and their pharmaceutically acceptable salts are prepared and disclosed as CCR5 antagonists. Thus, II was prepared by amidation of cis-4-{2-[3-(2-methyl-1H-benzimidazol-1-yl)-8-azabicyclo[3.2.1]oct-8-yl]ethyl}-4-phenylcyclohexanamine (preparation given) with 3-(aminosulfonyl)-4-chlorobenzoic acid. I have pIC50 values of ≥5 in assays for CCR5 antagonism. As CCR5 antagonists, I are useful for the treatment of viral infections (particularly HIV infection).

IT **280768-46-9 478696-46-7 714968-54-4**
714968-68-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of heterocyclylalkyl substituted cyclohexanes derivs. as CCR5 antagonists)

RN 280768-46-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane, 3-(2-methyl-1H-benzimidazol-1-yl)-, dihydrochloride, (3-endo)- (9CI) (CA INDEX NAME)

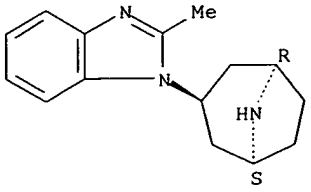
Relative stereochemistry.



●2 HCl

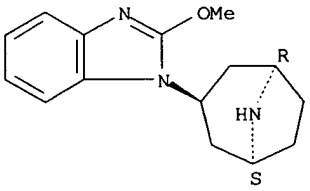
RN 478696-46-7 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-methyl-1H-benzimidazol-1-yl)-, (3-endo)-(9CI) (CA INDEX NAME)

Relative stereochemistry.



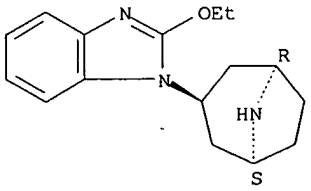
RN 714968-54-4 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-methoxy-1H-benzimidazol-1-yl)-, (3-endo)-(9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 714968-68-0 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-ethoxy-1H-benzimidazol-1-yl), (3-endo)-(9CI) (CA INDEX NAME)

Relative stereochemistry.

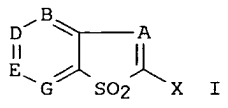


L21 ANSWER 9 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:42270 CAPLUS
DN 138:89958
TI Preparation of benzothiophene and benzothiazole compounds as cholinergic and monoamine receptor modulators
IN Peters, Dan; Olsen, Gunnar M.; Nielsen, Elsebet Ostergaard; Ahring, Philip K.; Jorgensen, Tino Dyhring
PA Neurosearch A/S, Den.
SO PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

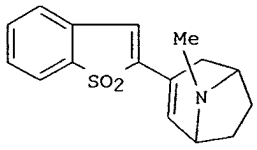
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003004493	A1	20030116	WO 2002-DK460	20020702
	WO 2003004493	C1	20030410		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
NZ 529880 A 20031219 NZ 2002-529880 20020702
EP 1406900 A1 20040414 EP 2002-754549 20020702
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
JP 2004532899 T2 20041028 JP 2003-510660 20020702
US 2004180877 A1 20040916 US 2003-482363 20031230
PRAI DK 2001-1064 A 20010706
DK 2001-64 A 20010706
WO 2002-DK460 W 20020702
OS MARPAT 138:89958
GI



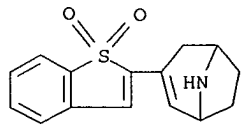
I



II

AB Novel compds. of formula I [A, B, D, E, G = C, N; X = heterocycle] are prepared that are found to be cholinergic ligands at the nicotinic acetylcholine receptors and modulators of the monoamine receptors and transporters. Due to their pharmacol. profile the compds. of the invention may be useful for the treatment of diseases or disorders as diverse as those related to the cholinergic system of the central nervous system (CNS), the peripheral nervous system (PNS), diseases or disorders related to smooth muscle contraction, endocrine diseases or disorders, diseases or disorders related to neuro-degeneration, diseases or disorders related to inflammation, pain, and withdrawal symptoms caused by the termination of abuse of chemical substances. Thus, was prepared and inhibited 3H-α-bungarotoxine binding in rat brain with IC50 of 0.018 μM.

IT **484650-60-4P**
RL: DGN (Diagnostic use); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of benzothiophene and benzothiazole compds. as cholinergic and monoamine receptor modulators)
RN 484650-60-4 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(1,1-dioxidobenzo[b]thien-2-yl)- (9CI) (CA INDEX NAME)

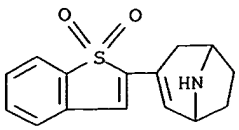


IT **484650-61-5P 484650-62-6P 484650-63-7P**
484650-65-9P 484651-19-6P 484651-20-9P
484651-21-0P
RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzothiophene and benzothiazole compds. as cholinergic and monoamine receptor modulators)
RN 484650-61-5 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(1,1-dioxidobenzo[b]thien-2-yl)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 484650-60-4

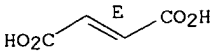
CMF C15 H15 N O2 S



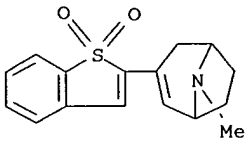
CM 2

CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.



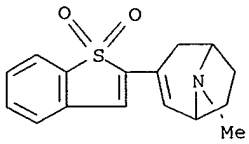
RN 484650-62-6 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(1,1-dioxidobenzo[b]thien-2-yl)-8-methyl- (9CI) (CA INDEX NAME)



RN 484650-63-7 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(1,1-dioxidobenzo[b]thien-2-yl)-8-methyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

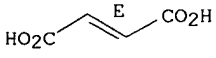
CRN 484650-62-6
CMF C16 H17 N O2 S



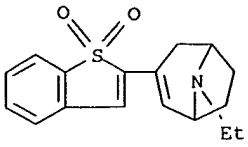
CM 2

CRN 110-17-8
CMF C4 H4 O4

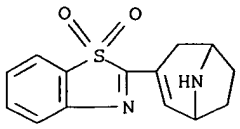
Double bond geometry as shown.



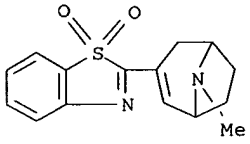
RN 484650-65-9 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(1,1-dioxidobenzo[b]thien-2-yl)-8-ethyl- (9CI) (CA INDEX NAME)



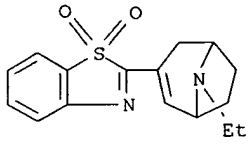
RN 484651-19-6 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(1,1-dioxido-2-benzothiazolyl)- (9CI) (CA INDEX NAME)



RN 484651-20-9 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(1,1-dioxido-2-benzothiazolyl)-8-methyl- (9CI) (CA INDEX NAME)

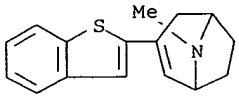


RN 484651-21-0 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(1,1-dioxido-2-benzothiazolyl)-8-ethyl- (9CI) (CA INDEX NAME)



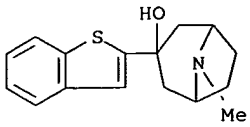
IT **216853-40-6P 484650-69-3P 484650-70-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of benzothiophene and benzothiazole compds. as cholinergic and monoamine receptor modulators)

RN 216853-40-6 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-benzo[b]thien-2-yl-8-methyl-, hydrochloride (9CI) (CA INDEX NAME)

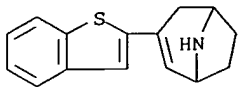


● HCl

RN 484650-69-3 CAPLUS
CN 8-Azabicyclo[3.2.1]octan-3-ol, 3-benzo[b]thien-2-yl-8-methyl- (9CI) (CA INDEX NAME)



RN 484650-70-6 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-benzo[b]thien-2-yl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 10 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:978630 CAPLUS
DN 138:39184
TI Preparation of bridged bicyclic amino-substituted pyrrolidine modulators of CCR5 chemokine receptor activity
IN Willoughby, Christopher A.; Rosauer, Keith; Chapman, Kevin T.; Mills, Sander G.; Shen, Dong-Ming; Shu, Min
PA USA
SO U.S. Pat. Appl. Publ., 46 pp.
CODEN: USXXCO
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002198178	A1	20021226	US 2001-974643	20011010
	US 6531484	B2	20030311		
PRAI	US 2000-240598P	P	20001011		

OS MARPAT 138:39184
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

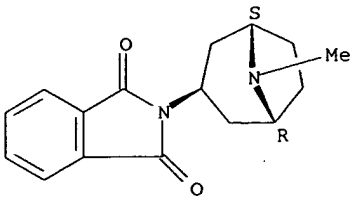
AB Title compds. I [R1 = COOH, NO2, tetrazolyl, etc.; R2 = H, alkyl; Q = (CH2)3, CH2OCH2, CH2S1-2CH2, etc.; j, k, l, m, n = 0-3; R3, R5 = Ph, naphthyl, heterocycle; R4 = H, alkyl; R6 = H, alkyl, cycloalkyl, etc.; R7 = H, alkyl; R8a-8b = H, alkyl, alkenyl, alkynyl, cycloalkyl, Ph, etc.] are prepared For instance, reductive alkylation of tropine-derived benzimidazole II (preparation given) and a substituted homochiral pyrrolidine-aldehyde (preparation given; 1,2-dichloroethane, NaBH(OAc)3) produced III. I are modulators of CCR5 chemokine receptor activity and are useful, e.g., in the prevention or treatment of infection by HIV and the treatment of AIDS as ingredients in pharmaceutical compns., optionally in combination with other antivirals, immunomodulators, antibiotics or vaccines. Methods of treating AIDS and methods of preventing or treating infection by HIV are also described.

IT **280761-95-7P 280762-26-7P 280762-27-8P**
478695-68-0P 478696-46-7P 478925-03-0P
478925-06-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(bridged bicyclic amino substituted pyrrolidine modulators of CCR5 chemokine receptor activity)

RN 280761-95-7 CAPLUS

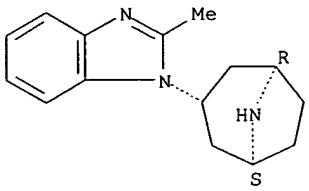
CN 1H-Isoindole-1,3(2H)-dione, 2-[(3-exo)-8-methyl-8-azabicyclo[3.2.1]oct-3-yl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.



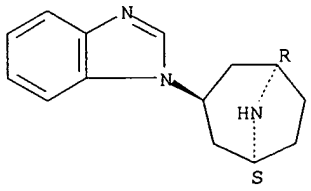
RN 280762-26-7 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-methyl-1H-benzimidazol-1-yl)-, (3-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



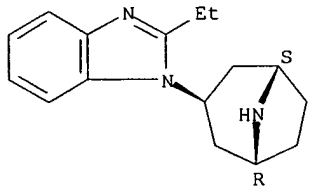
RN 280762-27-8 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1H-benzimidazol-1-yl)-, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



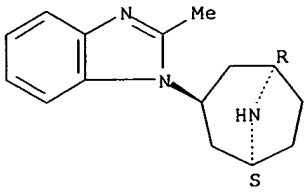
RN 478695-68-0 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-ethyl-1H-benzimidazol-1-yl)-, (3-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



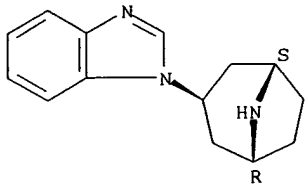
RN 478696-46-7 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-methyl-1H-benzimidazol-1-yl)-, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



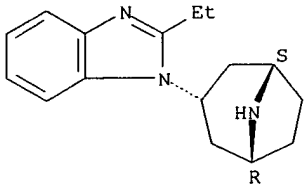
RN 478925-03-0 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1H-benzimidazol-1-yl)-, (3-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 478925-06-3 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-ethyl-1H-benzimidazol-1-yl)-, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

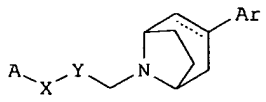


L21 ANSWER 11 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:927428 CAPLUS
DN 138:14010
TI Preparation of aryl-8-azabicyclo[3.2.1]octanes for the treatment of depression
IN Gilbert, Adam Matthew
PA Wyeth, John, and Brother Ltd., USA
SO PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

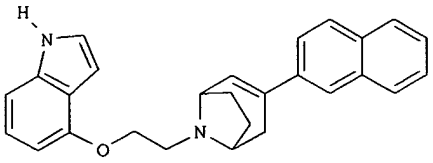
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002096906	A1	20021205	WO 2002-US16008	20020520
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	TW 589312	B	20040601	TW 2002-91110010	20020514
	US 2003032645	A1	20030213	US 2002-151210	20020520
	US 6632824	B2	20031014		
	EP 1390364	A1	20040225	EP 2002-731881	20020520
	EP 1390364	B1	20040929		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

	IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	BR 2002009995	A	20040406	BR 2002-9995	20020520
	AT 277924	E	20041015	AT 2002-731881	20020520
	JP 2004533459	T2	20041104	JP 2003-500085	20020520
PRAI	US 2001-293563P	P	20010525		
	WO 2002-US16008	W	20020520		

OS MARPAT 138:14010
GI



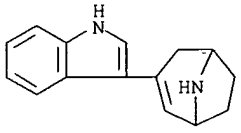
I



II

AB Title compds. I [X = NH, O or S; Y = (CH2)n where n = 0-3; A = (un)-substituted Ph or -pyridyl ring with addnl. possibility of being fused to an addnl. cycloalkyl or heterocyclic group using the ortho and meta positions; Ar = (un)substituted -indolyl, -Ph, -naphthyl, -anthracenyl, -phenanthrenyl, -benzyl, -benzofuryl, or -benzothienyl] are prepared and disclosed as compds. for the treatment of depression. Thus, II was prepared by N-alkylation of 3-naphththalen-2-yl-8-azabicyclo[3.2.1]oct-2-ene (preparation given) with 4-(2-chloroethoxy)-1H-indole (preparation given). I possessed IC50 values (nM) in the range of 3.5-191.0 in binding assays with cells possessing the human 5-HT transporter. The invention also includes formulations containing these compds., and methods for making and using compds. of this invention.

IT **477601-23-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and antidepressant activity of arylazabicyclooctanes)
RN 477601-23-3 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

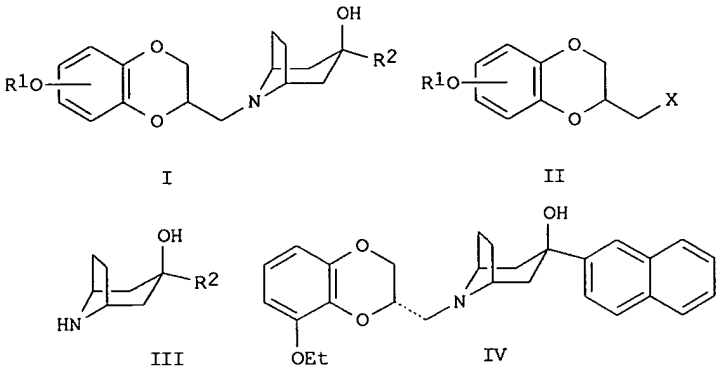
L21 ANSWER 12 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:832796 CAPLUS
DN 137:337897
TI Preparation of 8-aza-bicyclo[3.2.1]octan-3-ol derivatives of 2,3-dihydro-1,4-benzodioxan and their 5-HT1A antagonist activity
IN Gilbert, Adam Matthew; Stack, Gary Paul
PA Wyeth, John, and Brother Ltd., USA
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	WO 2002085900	A1	20021031	WO 2002-US12837	20020424
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2003032648	A1	20030213	US 2002-128057	20020423
	US 6656951	B2	20031202		
	US 2004063728	A1	20040401	US 2003-663533	20030916
PRAI	US 2001-286061P	P	20010424		
	US 2002-128057	A1	20020423		

OS MARPAT 137:337897

GI



AB The title compds. I (R1 = 1-6 carbon straight chain alkyl, 3-8 carbon branched alkyl, R2 = Ph, naphthyl, pyridyl, etc.) were prepared by reacting benzodioxans II (X = halogen, SO2CF3, alkylsulfonate, etc.) with the corresponding hydroxy azabicyclooctanol derivs. III. Thus, naphthalenylazabicyclooctanol IV was prepared from tropinone, 2-bromonaphthalene, and (R)-toluene-4-sulfonic acid 8-ethoxy-2,3-dihydrobenzo[1,4]dioxin-2-ylmethyl ester. In the HC 5-HT1A binding assay, IV had an activity of 5.9 nm Ki. I are useful for treating the cognitive deficits due to aging, stroke, head trauma, Alzheimer's disease or other neurodegenerative diseases, or schizophrenia and also treatment of disorders related to excessive serotonergic stimulation, such as anxiety, aggression and stress, and for the control of various physiol. phenomena, such as appetite, thermoregulation, sleep and sexual behavior, which are known the be, at least in part, under serotonergic influence.

IT **473969-02-7P**

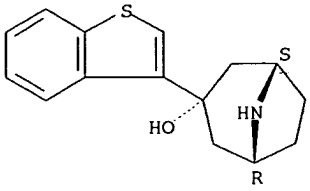
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of azabicyclooctanol benzodioxan derivs. and their 5-HT1A antagonist activity using cloned human-5HT1A receptors for treatment of cognitive deficit disorders and disorders due to excessive serotonin stimulation)

RN 473969-02-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octan-3-ol, 3-benzo[b]thien-3-yl-, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

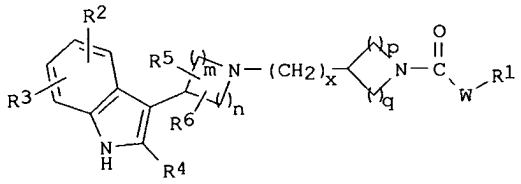


RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

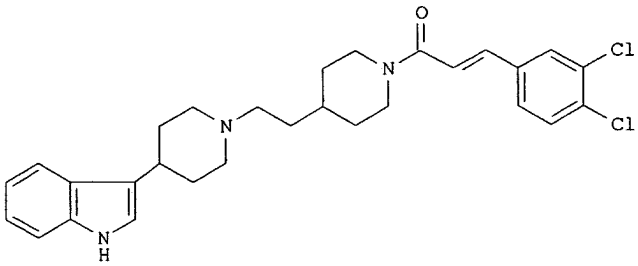
L21 ANSWER 13 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:777926 CAPLUS
DN 137:294869
TI Preparation of 3-substituted indoles or fused pyrroles as antagonists of the chemokine MCP-1 (CCR2B) receptor
IN Gribble, Andrew Derrick; Forbes, Ian Thomson; Cooper, David Gwyn
PA Smithkline Beecham P.L.C., UK
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002079190	A1	20021010	WO 2002-EP3572	20020328
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	GB 2001-7907	A	20010329		

OS MARPAT 137:294869
GI



I



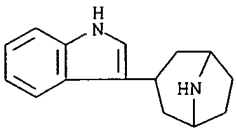
II

AB Title compds. I [R1 = alkyl, aryl, heteroaryl; R2-3 = H , halo, CN, alkyl, cycloalkyl, alkoxy, haloalkyl, hydroxy, amino, etc.; R4 = H, alkyl; R5-6=

H, alkyl or together with the carbon atoms of the ring to which they are attached form a bridging 5-7-membered ring; W = bond, alkylene, alkyl, CH2O, CH2S, trans-(E)-CR7=CHY; R7 = H, alkyl; Y = bond, trans-(E)-CH=CH, CO; m, n = 1-3; p, q = 1-2; x = 1-4] were prepared For example N-tert-butoxycarbonylamino-4-(2-bromoethyl)piperidine (preparation given) was used to alkylate 4-(indol-3-yl)piperidine (DMF, NaHCO3, 80°, 18 h), the product deprotected (CH2Cl2, TFA) and the resulting foam coupled to 3,4-dichlorocinnamoyl chloride (CH2Cl2/NaOHaq) to afford II. Selected example compds. had pKb in the range of 5-7.6 for the MCP-1 receptor. I are useful in treating inflammatory conditions with monocyte and/or lymphocyte involvement.

IT **467449-53-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of 3-substituted indoles or fused pyrroles as antagonists of chemokine MCP-1 (CCR2B) receptor)

RN 467449-53-2 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

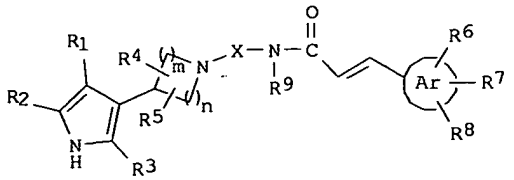
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 14 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:777889 CAPLUS
DN 137:294868
TI Preparation of 3-substituted indoles or fused pyrroles as antagonists of the chemokine MCP-1 (CCR2B) receptor
IN Gribble, Andrew Derrick; Forbes, Ian Thomson; Witherington, Jason
PA Smithkline Beecham P.L.C., UK
SO PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

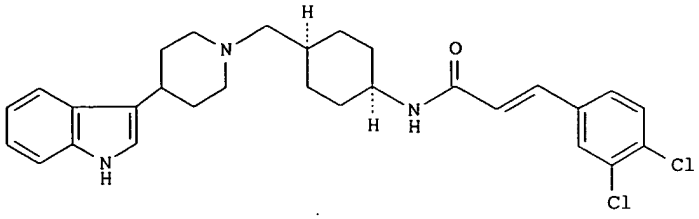
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002079151	A1	20021010	WO 2002-EP3570	20020328
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	GB 2001-7904	A	20010329		
	GB 2001-7906	A	20010329		

OS MARPAT 137:294868
GI

10726680



I



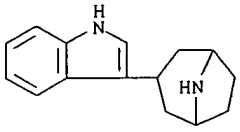
II

AB Title compds. I [Ar = (hetero)aryl group; R1-2 form the residue of a 5 to 7 membered monocyclic heteroaryl ring; R3 = H, alkyl; R4-5 = H, alkyl or together with the carbon atoms of the ring to which they are attached form a bridging 5-7-membered ring; R6-8 = H, halo, CN, alkyl, cycloalkyl, alkoxy, haloalkyl, hydroxy, amino, etc.; R9 = H, alkyl or arylalkyl; X = alkyl; m,n = 1-3] were prepared For instance, cis-4-tert-Butoxycarbonylamino-1-cyclohexanecarboxylic acid (preparation given) was reduced (THF, BH3•SMe2) and oxidized to the aldehyde (THF, DMSO, ClCOCOCl, TEA) and used to alkylate 4-(indol-3-yl)piperidine (CH2Cl2, NaHB(OAc)3). The resulting intermediate was deprotected (EtOH, HCl) and coupled to 3,4-dichlorocinnamic acid (CH2Cl2, EDCI, HOBt) to afford II. Selected example compds. had pKb in the range of 7.1 - 8.0 for the MCP-1 receptor. I are useful in treating inflammatory conditions with monocyte and/or lymphocyte involvement.

IT **467449-53-2P**, 3-(8-Azabicyclo[3.2.1]oct-3-yl)-1H-indole hydrochloride
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; 3-substituted indoles or fused pyrroles as antagonists of chemokine MCP-1 (CCR2B) receptor)

RN 467449-53-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane, 3-(1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 15 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:615604 CAPLUS
DN 137:169522
TI Preparation of N-ind(az)olylsulfonyl-2-piperidinoethylpyrrolidines and analogs as 5-HT7 receptor agonists
IN Forbes, Ian Thomson; Gribble, Andrew Derrick
PA Smithkline Beecham P.L.C., UK
SO PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DT **Patent**
LA English

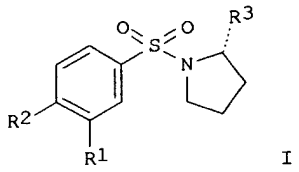
10726680

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002062788	A1	20020815	WO 2002-GB447	20020201
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1355902	A1	20031029	EP 2002-710148	20020201
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2004521902	T2	20040722	JP 2002-563141	20020201
	US 2004267010	A1	20041230	US 2004-466922	20040727
PRAI	GB 2001-2713	A	20010202		
	GB 2001-2714	A	20010202		
	WO 2002-GB447	W	20020201		

OS MARPAT 137:169522

GI



I

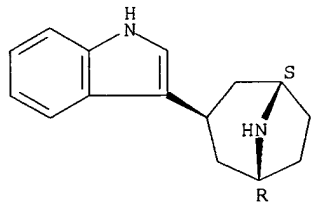
AB Title compds. [e.g., I; R1R2 = NHCH:CH, NHN:CH, NHCOCH2O; R3 = CH2CH2ZR; R = 2- or 3-indolyl, 2-oxo-2,3-dihydrobenzimidazol- or -benzoxazolyl, Z1C6H4R4-4, etc.; R4 = F, Cl, iodo; Z = (2,6-ethano) piperidine-1,4-diyl; Z1 = O or CO] were prepared Thus, I (R = CH2CH2R5, R1R2 = NHCH:CH)(II; R5 = Br)(preparation given) was aminated by 3-(4-piperidinyl)-1H-indole to give II [R5 = 4-(3-indolyl)piperidino]. Data for biol. activity of I were given.

IT **329005-63-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of N-ind(az)olylsulfonyl-2-piperidinoethylpyrrolidines and analogs as 5-HT7 receptor agonists)

RN 329005-63-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane, 3-(1H-indol-3-yl)-, (3-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 16 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:293427 CAPLUS

DN 136:325574

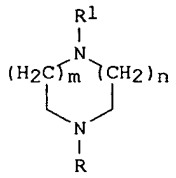
TI Preparation of piperazine, homopiperazine, and 8-azabicyclo[3.2.1]oct-2-ene, and 3,9-diazabicyclo[4.2.1]nonane derivatives for treatment of affective disorders by the combined action of a nicotinic receptor agonist and a monoaminergic substance

10726680

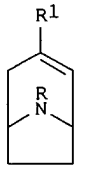
IN Olsen, Gunnar M.; Peters, Dan; Nielsen, Elsebet Ostergaard
PA Neurosearch A/S, Den.
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002030405	A2	20020418	WO 2001-DK661	20011010
	WO 2002030405	A3	20020906		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2425638	AA	20020418	CA 2001-2425638	20011010
	AU 2001095436	A5	20020422	AU 2001-95436	20011010
	EP 1358177	A2	20031105	EP 2001-976043	20011010
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2004510813	T2	20040408	JP 2002-533848	20011010
	NZ 524202	A	20040827	NZ 2001-524202	20011010
	US 2004092508	A1	20040513	US 2003-380653	20030317
PRAI	DK 2000-1535	A	20001013		
	US 2000-242146P	P	20001023		
	WO 2001-DK661	W	20011010		

OS MARPAT 136:325574
GI



I

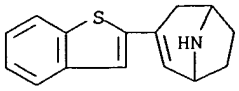


II

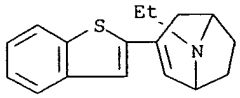
AB This invention relates to use of the combined action of a nicotinic acetylcholine receptor agonist and a monoamine reuptake inhibitor for the treatment of affective disorders including depression, anxiety, obsessive compulsive disorder (OCD), panic disorder, or pain, as well as to pharmaceutical compns. comprising these substances and chemical substances for use according to the invention. The chemical substances are represented by piperazine and homopiperazine derivs. (I; n = 1,2,3; m = 0,1,2; R = H, alkyl, cycloalkyl, cycloalkylalkyl, alkoxy, acyl, benzyl; R1 = 5-bromo-3-pyridyl, 6-chloro-3-pyridyl, 6-bromo-5-methoxy-3-pyridyl, 6-bromo-3-pyridyl, 6-bromo-5-chloro-3-pyridyl, 5,6-dibromo-3-pyridyl, etc.) and 8-azabicyclo[3.2.1]oct-2-ene derivs. (II; R = H, alkyl, alkenyl, cycloalkyl, cyanoalkyl, Ph, naphthyl, benzyl; R1 = CHO, alkanoyl, cycloalkanoyl, carbamoyl, furanyl, thienyl, pyrrolyl, oxazolyl, isoxazolyl, imidazolyl, pyridyl, pyrimidinyl, thiazolyl, naphthyl, indolyl, benzofuranyl, etc.). Thus, 1-(6-Chloro-3-pyridyl)piperazine (III) (0.3, 1, 3, 10 mg/kg s.c.) was tested in the mouse forced swim test which is considered predictive of a potential antidepressant pharmacol. effect and it did not affect forced swimming with a 30 min pretreatment. However, the combination of venlafaxine and III (1+3; 3+3; 10+1; 10+3 mg/kg s.c.) significantly increased the forced swimming in NMRI mice.

IT **412347-70-7P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(intermediate; preparation of piperazine, homopiperazine, azabicyclo[3.2.1]octene, and diazabicyclo[4.2.1]nonane derivs. for treatment of affective disorders)

RN 412347-70-7 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-benzo[b]thien-2-yl- (9CI) (CA INDEX NAME)



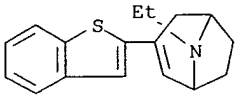
IT **412347-74-1P 412347-75-2P 412347-94-5P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of piperazine, homopiperazine, azabicyclo[3.2.1]octene, and diazabicyclo[4.2.1]nonane derivs. for treatment of affective disorders)
RN 412347-74-1 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-benzo[b]thien-2-yl-8-ethyl- (9CI) (CA INDEX NAME)



RN 412347-75-2 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-benzo[b]thien-2-yl-8-ethyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

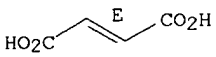
CRN 412347-74-1
CMF C17 H19 N S



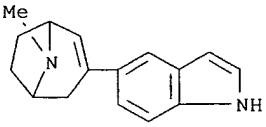
CM 2

CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.



RN 412347-94-5 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(1H-indol-5-yl)-8-methyl- (9CI) (CA INDEX NAME)

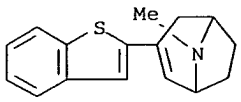


IT **216853-33-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of piperazine, homopiperazine,

azabicyclo[3.2.1]octene, and diazabicyclo[4.2.1]nonane derivs. for treatment of affective disorders)

RN 216853-33-7 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-benzo[b]thien-2-yl-8-methyl- (9CI) (CA INDEX NAME)



L21 ANSWER 17 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:256232 CAPLUS

DN 136:294857

TI Preparation of nitrogen-containing compounds as the active ingredient of CCR3 inhibitors

IN Takahashi, Toshiya; Imaoka, Takayuki; Tomioka, Hiroki; Hatakeyama, Daigo; Nitta, Aiko; Kaneko, Masayuki; Takizawa, Satoko; Torii, Yuichi; Morihira, Koichiro; Morokata, Tatsuaki

PA Toray Industries, Inc., Japan

SO PCT Int. Appl., 146 pp.
CODEN: PIXXD2

DT **Patent**

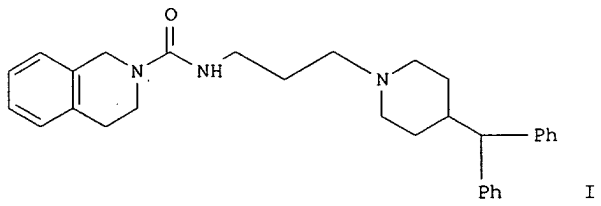
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002026708	A1	20020404	WO 2001-JP8466	20010927
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2002187880	A2	20020705	JP 2001-293350	20010926
	AU 2001092276	A5	20020408	AU 2001-92276	20010927
PRAI	JP 2000-294355	A	20000927		
	JP 2000-313405	A	20001013		
	WO 2001-JP8466	W	20010927		

OS MARPAT 136:294857

GI



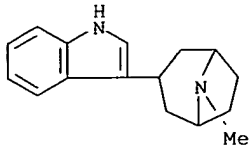
I

AB Title compds. [Ar(CH2)nA(CH2)m(Y)xBB1; Ar = (un)substituted-1,2,3,4-tetrahydroisoquinoline-2-yl, 3-substituted-pyrimidine-2-one-1-yl, C6H5CH2NHCH2CH2NH, 3-benzyl-imidazole-2-one-1-yl, 1,3-dihydro-isoindole-2-yl, C6H5, CONH(CH2)3; C(NH)NH(CH2)3, CO, N(CH3)C(:NH)NH(CH2)3, N(CH3)C(:NH)NHCH2CH2, n = 0, 1, 2, 3; A = 1-piperidinyl, 1-piperazinyl, 1-homopiperazinyl; m = 0, 1, 2, 3; x = 0, 1; Y = CO, SO2; B = H, (un)substituted-aryl, (un)substituted-heterocyclyl; B1 = (un)substituted-aryl, electron pair, etc] and pharmaceutically acceptable salts are prepared and are useful as CCR3 inhibitors to be used in preventing and treating allergic inflammatory diseases caused by leukergy of lymphocytes, eosinocytes, basophilic leukocytes. Thus, the title compound I was prepared with 54% yield from 1,2,3,4-tetrahydroisoquinoline-2-carbonyl chloride and 3-(4-(diphenylmethyl)piperidinyl)propylamine in THF

at room temperature for 4 h. The title compound I was tested for CCR3 inhibition (IC50 = 2.1 μM) with B300-19 cells.

IT **406923-52-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of nitrogen-containing compds. as the active ingredient of CCR3 inhibitors)

RN 406923-52-2 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1H-indol-3-yl)-8-methyl- (9CI) (CA INDEX NAME)

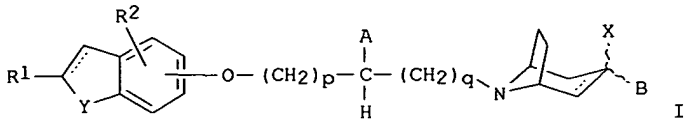


RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

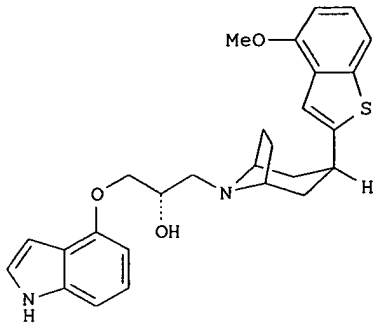
L21 ANSWER 18 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:472712 CAPLUS
DN 135:76800
TI Azabicyclo[3.2.1]octane derivatives with activity as serotonin reuptake inhibitors and 5-HT1A antagonists, and their use as antidepressants.
IN He, John Xiaoqiang; Honigschmidt, Nicholas Allan; Kohn, Todd Jonathan; Rocco, Vincent Patrick; Spinazze, Patrick Gianpietro; Takeuchi, Kumiko
PA Eli Lilly and Co., USA
SO PCT Int. Appl., 97 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001046187	A1	20010628	WO 2000-US32431	20001206
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1242419	A1	20020925	EP 2000-982253	20001206
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	US 1999-172610P	P	19991220		
	WO 2000-US32431	W	20001206		

OS MARPAT 135:76800
GI



I

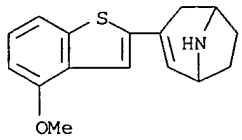


II

AB The invention provides compds. of formula I [A = H, OH, alkoxy; B = (un)substituted benzothienyl, benzofuranyl, indolyl, benzothiazolyl, benzimidazolyl, benzoxazolyl, quinolinyl, phthalazinyl, naphthalenyl, or benzo[h]quinolinyl; X = H, OH, alkoxy, or is absent; Y = CH2, NH, or S; R1 = H, F, alkyl, CONH2 or (di)alkyl derivs., cyano; R2 = H, F, Cl, Br, iodo, OH, alkyl, or alkoxy; p = 0-4; q = 0-3] and their pharmaceutically acceptable salts. The compds. are potent serotonin reuptake inhibitors and antagonists of 5-HT1A receptors (no data). As such, they are expected to be useful for treating depression, anxiety, and alleviating the symptoms caused by withdrawal or partial withdrawal from the use of tobacco or of nicotine. Fourteen synthetic examples and several precursor prepns. are given. For instance, title compound II was prepared in 87% yield by reaction of endo-3-(4-methoxybenzo[b]thiophen-2-yl)-8-azabicyclo[3.2.1]octane (preparation given) with (S)-4-(oxiranylmethoxy)indole in refluxing MeOH.

IT **345995-30-4P 345995-31-5P 345995-33-7P**
345995-34-8P 346465-78-9P 346465-79-0P
346465-81-4P 346465-85-8P 346465-86-9P
346465-89-2P 346465-94-9P 346730-92-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of azabicyclooctane derivs. as serotonin reuptake inhibitors and 5-HT1A antagonists for use as antidepressants)

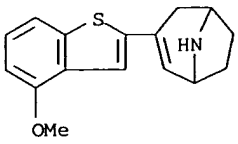
RN 345995-30-4 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(4-methoxybenzo[b]thien-2-yl)- (9CI) (CA INDEX NAME)



RN 345995-31-5 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(4-methoxybenzo[b]thien-2-yl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

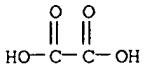
CM 1

CRN 345995-30-4
CMF C16 H17 N O S



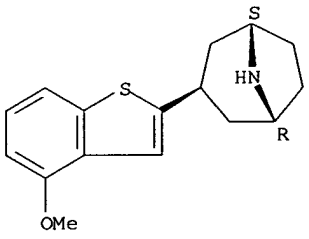
CM 2

CRN 144-62-7
CMF C2 H2 O4



RN 345995-33-7 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(4-methoxybenzo[b]thien-2-yl)-, (3-exo)-
(9CI) (CA INDEX NAME)

Relative stereochemistry.

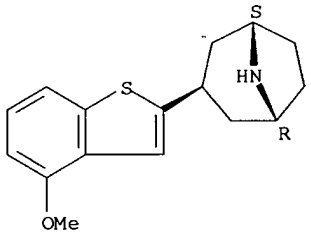


RN 345995-34-8 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(4-methoxybenzo[b]thien-2-yl)-, (3-exo)-,
ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

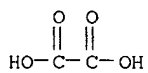
CRN 345995-33-7
CMF C16 H19 N O S

Relative stereochemistry.

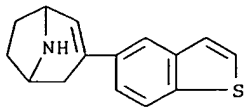


CM 2

CRN 144-62-7
CMF C2 H2 O4



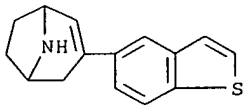
RN 346465-78-9 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-benzo[b]thien-5-yl- (9CI) (CA INDEX NAME)



RN 346465-79-0 CAPLUS
CN Butanedioic acid, compd. with 3-benzo[b]thien-5-yl-8-azabicyclo[3.2.1]oct-2-ene (1:1) (9CI) (CA INDEX NAME)

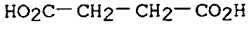
CM 1

CRN 346465-78-9
CMF C15 H15 N S

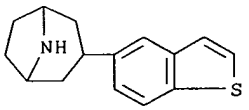


CM 2

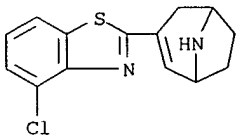
CRN 110-15-6
CMF C4 H6 O4



RN 346465-81-4 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-benzo[b]thien-5-yl- (9CI) (CA INDEX NAME)

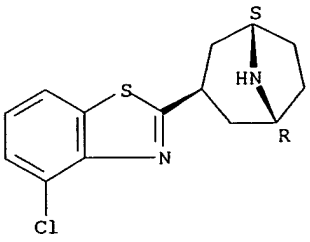


RN 346465-85-8 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(4-chloro-2-benzothiazolyl)- (9CI) (CA INDEX NAME)



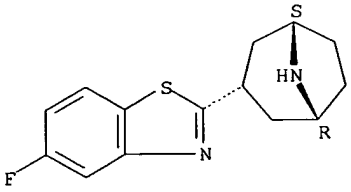
RN 346465-86-9 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(4-chloro-2-benzothiazolyl)-, (3-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



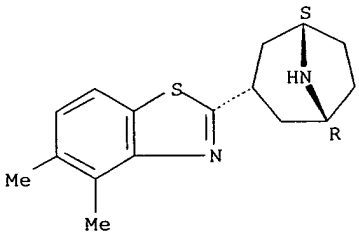
RN 346465-89-2 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(5-fluoro-2-benzothiazolyl)-, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



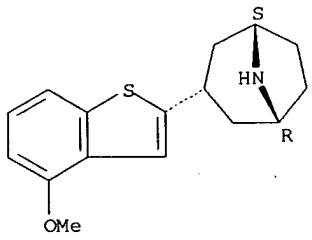
RN 346465-94-9 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(4,5-dimethyl-2-benzothiazolyl)-, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 346730-92-5 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(4-methoxybenzo[b]thien-2-yl)-, (3-endo)- (9CI) (CA INDEX NAME)

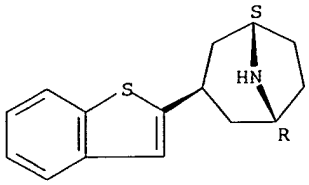
Relative stereochemistry.



IT **346465-82-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(precursor; preparation of azabicyclooctane derivs. as serotonin reuptake inhibitors and 5-HT1A antagonists for use as antidepressants)
RN 346465-82-5 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-benzo[b]thien-2-yl-, (3-exo)- (9CI) (CA INDEX NAME)

10726680

Relative stereochemistry.

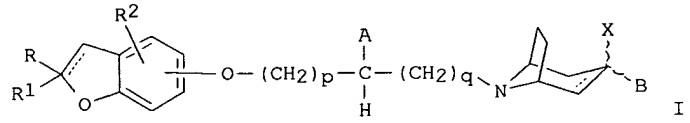


RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

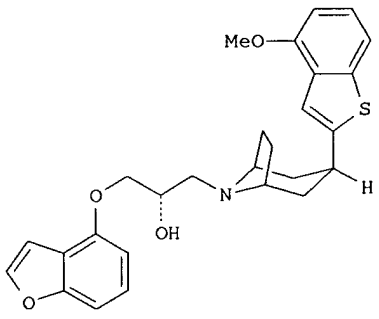
L21 ANSWER 19 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:472711 CAPLUS
DN 135:76778
TI Benzofuran derivatives with activity as serotonin reuptake inhibitors and 5-HT1A antagonists, and their use as antidepressants.
IN He, John Xiaoqiang; Honigschmidt, Nicholas Allan; Kohn, Todd Jonathan; Rocco, Vincent Patrick; Spinazze, Patrick Gianpietro; Takeuchi, Kumiko
PA Eli Lilly and Company, USA
SO PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001046186	A1	20010628	WO 2000-US32425	20001206
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1248786	A1	20021016	EP 2000-983784	20001206
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 2003130513	A1	20030710	US 2002-148768	20020909
	US 6835733	B2	20041228		
PRAI	US 1999-172742P	P	19991220		
	WO 2000-US32425	W	20001206		

OS MARPAT 135:76778
GI



I

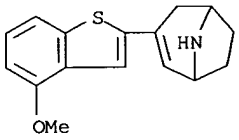


II

AB The invention provides compds. of formula I [A = H, OH, alkoxy; B = (un)substituted benzothienyl, benzofuranyl, indolyl, benzothiazolyl, benzimidazolyl, benzoxazolyl, quinolinyl, phthalazinyl, naphthalenyl, or benzo[h]quinolinyl; X = H, OH, alkoxy, or is absent; R, R1 = H, F, alkyl, CONH2 or (di)alkyl derivs., cyano, or R1 is absent; R2 = H, F, Cl, Br, iodo, OH, alkyl, or alkoxy; p = 0-4; q = 0-3] and their pharmaceutically acceptable salts. The compds. are potent serotonin reuptake inhibitors and antagonists of 5-HT1A receptors (no data). As such, they are expected to be useful for treating depression, anxiety, and alleviating the symptoms caused by withdrawal or partial withdrawal from the use of tobacco or of nicotine. Three synthetic examples and several precursor prepns. are given. For instance, title compound II (as the oxalate) was prepared in 84% yield by reaction of endo-3-(4-methoxybenzo[b]thiophen-2-yl)-8-azabicyclo[3.2.1]octane (preparation given) with (2S)-4-(glycidyloxy)benzofuran in refluxing MeOH.

IT **345995-30-4P 345995-31-5P 345995-33-7P 345995-34-8P 346730-92-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of benzofuran derivs. as serotonin reuptake inhibitors and 5-HT1A antagonists for use as antidepressants)

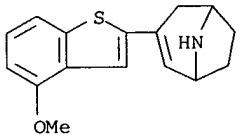
RN 345995-30-4 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(4-methoxybenzo[b]thien-2-yl)- (9CI) (CA INDEX NAME)



RN 345995-31-5 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(4-methoxybenzo[b]thien-2-yl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

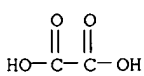
CM 1

CRN 345995-30-4
CMF C16 H17 N O S



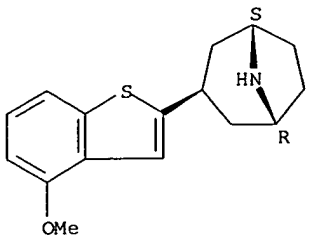
CM 2

CRN 144-62-7
CMF C2 H2 O4



RN 345995-33-7 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(4-methoxybenzo[b]thien-2-yl)-, (3-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

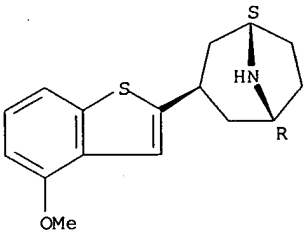


RN 345995-34-8 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(4-methoxybenzo[b]thien-2-yl)-, (3-exo)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

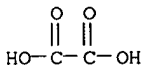
CRN 345995-33-7
CMF C16 H19 N O S

Relative stereochemistry.



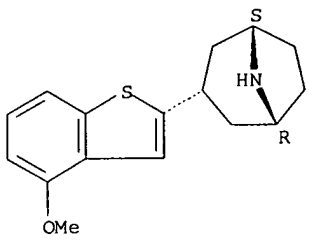
CM 2

CRN 144-62-7
CMF C2 H2 O4



RN 346730-92-5 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(4-methoxybenzo[b]thien-2-yl)-, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 20 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:338520 CAPLUS
DN 134:340521
TI Preparation of naphthalenes, piperidines, imidazoles, and quinazolines as

10726680

calcitonin gene-related peptide receptor antagonists.

IN Rudolf, Klaus; Eberlein, Wolfgang; Engel, Wolfhard; Doods, Henri; Hallermayer, Gerhard; Bauer, Eckhart

PA Boehringer Ingelheim Pharma K.-G., Germany

SO PCT Int. Appl., 212 pp.
CODEN: PIXXD2

DT **Patent**

LA German

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001032649	A1	20010510	WO 2000-EP10463	20001024
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 19952146	A1	20010607	DE 1999-19952146	19991029
CA 2387613	AA	20010510	CA 2000-2387613	20001024
EP 1228060	A1	20020807	EP 2000-977432	20001024
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003513088	T2	20030408	JP 2001-534800	20001024
PRAI DE 1999-19952146	A	19991029		
WO 2000-EP10463	W	20001024		

OS MARPAT 134:340521

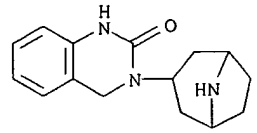
GI

AB RZ1Z2Z3R1 R = amino, Q1; m, n = 1, or m, n can = 0 if Y ≠ N; Y = C, or Y can = N if Y is not bonded to a heteroatom; R2 = unshared electron pair if Y = N, or R2 = H, alkyl if Y = C; R3, R4 = H; or R3R4 = C1-3 alkylene; R5, R6 = H, or R5R6 = (methylimino-interrupted) C1-3 alkylene; RN = (substituted) heterocyclyl, or RN = OH, benzylaminocarbonyl, etc. if Y = C; Z1 = CH2, CO; Z2 = (substituted) CH2CH2, (CH2)3, NHCH2, NH(CH2)2, CH:CH, Q2; p, q = 1-4; N is bonded to Z3; Z3 = CH2, CO; R1 = Ph, naphthyl, benzimidazolyl, etc., were prepared Thus, 1-[4-(4-amino-3,5-dibromophenyl)-1,4-dioxobutyl]-N-[(2-aminophenyl)methyl]-4-piperidinamine and N,N'-thiocarbonyldiimidazole were stirred together in DMF for 1.5 h at 100° to give 89% 3-[1-[4-(4-amino-3,5-dibromophenyl)-1,4-dioxobutyl]-4-piperidinyl]-3,4-dihydro-2(1H)-quinazolinthione. Title compds. showed CGRP antagonism in SK-N-MC cells in the range of 10-11 M to 10-5 M.

IT **337909-98-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of naphthalenes, piperidines, imidazoles, and quinazolines as medicaments)

RN 337909-98-5 CAPLUS

CN 2(1H)-Quinazolinone, 3-(8-azabicyclo[3.2.1]oct-3-yl)-3,4-dihydro- (9CI) (CA INDEX NAME)

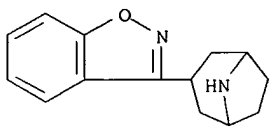


RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 21 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:208282 CAPLUS
DN 134:237472
TI Preparation of 1-amino-3-thienoisoxazolylphenoxy-2-propanols as dopamine D4 antagonists
IN Fink, David M.; Freed, Brian S.; Hrib, Nicholas J.; Kosley, Raymond W., Jr.; Lee, George E.; Merriman, Gregory H.; Rauckman, Barbara S.
PA Aventis Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 157 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001019833	A1	20010322	WO 2000-US24962	20000913
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2383340	AA	20010322	CA 2000-2383340	20000913
	BR 2000014515	A	20020625	BR 2000-14515	20000913
	EP 1216250	A1	20020626	EP 2000-964969	20000913
	EP 1216250	B1	20031119		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	EE 200200135	A	20030415	EE 2002-135	20000913
	AT 254621	E	20031215	AT 2000-964969	20000913
	PT 1216250	T	20040430	PT 2000-964969	20000913
	ES 2209995	T3	20040701	ES 2000-964969	20000913
	TW 530060	B	20030501	TW 2000-89118850	20000914
	NO 2002001251	A	20020510	NO 2002-1251	20020313
	ZA 2002001762	A	20030602	ZA 2002-1762	20020321
PRAI	US 1999-396081	A1	19990914		
	WO 2000-US24962	W	20000913		

OS MARPAT 134:237472
AB RZOCH2CR1R2CH2NR3R4 [I; R = e.g., thieno[2,3-d]isoxazol-3-yl; R1 = OH or alkoxy; R2,R4 = H or alkyl; R3 = CH2R5, CH2CH(OH)R5, indanyl, etc.; R5 = cyclohex(en)yl, (hetero)aryl, etc.; Z = phenylene] were prepared Thus, 3-bromothiophene was acylated by 3-(MeO)C6H4COCl and the oximated product cyclized to give, after O-demethylation, 3-RC6H4OH [R = thieno[2,3-d]isoxazol-3-yl] which was etherified by (R)-glycidyl tosylate and the product aminated by PhCHMeNH2 to give (R)-3-RC6H4OCH2CH(OH)CH2NMeCH2Ph (R as above). Data for biol. activity of I were given.
IT **152535-43-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of 1-amino-3-thienoisoxazolylphenoxy-2-propanols as dopamine D4 antagonists)
RN 152535-43-8 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1,2-benzisoxazol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

10726680

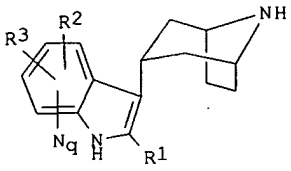
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 22 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:152680 CAPLUS
DN 134:208001
TI Process for preparation of indolyltropane derivatives
IN Forbes, Ian Thomson
PA Smithkline Beecham P.L.C., UK
SO PCT Int. Appl., 16 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

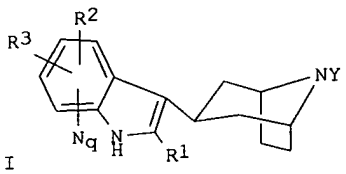
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001014374	A2	20010301	WO 2000-EP7697	20000808
WO 2001014374	A3	20011011		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

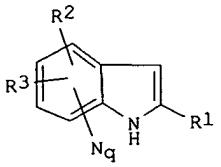
PRAI GB 1999-19843 A 19990820
OS CASREACT 134:208001; MARPAT 134:208001
GI



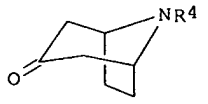
I



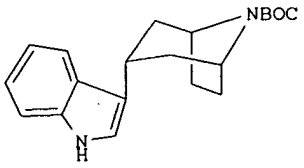
II



III



IV



V

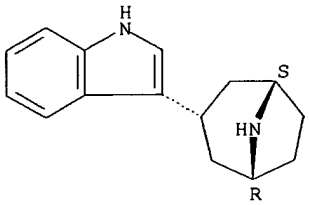
AB A process is described for the stereoselective preparation of exo- and endo-indolyltropanes I and II (R1 = H or (C1-6)alkyl; R2 and R3 may be the same or different, are selected from H, halo, cyano, (C1-6)alkyl, (C3-7)cycloalkyl, (C1-6)alkoxy, halo(C1-6)alkyl, hydroxy, oxo, amino, mono- or di-(C1-6)alkylamino, acylamino, nitro, carboxy, (C1-6)alkoxycarbonyl, (C1-6)alkenyloxycarbonyl, (C1-6)alkoxycarbonyl(C1-6)alkyl, carboxy(C1-6)alkyl, (C1-6)alkylcarbonyloxy, carboxy(C1-6)alkyloxy, (C1-6)alkoxycarbonyl(C1-6)alkoxy, (C1-6)alkylthio, (C1-6)alkylsulfinyl, (C1-6)alkylsulfonyl, sulfamoyl, mono- and di-(C1-6)-alkylsulfamoyl, carbamoyl, mono- and di-(C1-6)alkylcarbamoyl, (C1-6)alkylsulfonamido, arylsulfonamido, aryl, aryl(C1-6)alkyl, aryl(C1-6)alkoxy, aryloxy, and heterocyclyl; Y = H, nitrogen protecting group or an organic substituent; and Nq represents optional ring nitrogen atoms in positions 4, 5, 6, and 7; wherein q is 0, 1 or 2) by reaction of the indoles III with tropanes IV (R4 = H, BOC) followed by hydrogenation. Thus, N-(benzyloxycarbonyl)tropinone was condensed with indole in AcOH

containing AcOH and the product hydrogenated in EtOH in presence of Pd followed by reaction with di-tert-Bu dicarbonate to give the indolyltropane V.

IT **328235-06-9P 328235-09-2P 329005-63-2P**
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(process for preparation of indolyltropane derivs.)

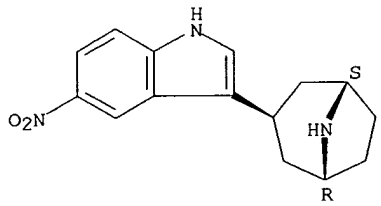
RN 328235-06-9 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1H-indol-3-yl)-, (1R,5S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



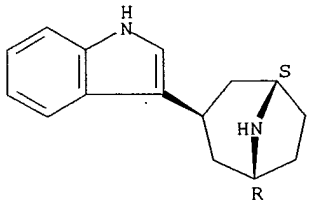
RN 328235-09-2 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(5-nitro-1H-indol-3-yl)-, (1R,5S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 329005-63-2 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1H-indol-3-yl)-, (3-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L21 ANSWER 23 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:456881 CAPLUS
DN 133:89523
TI Preparation of acylaminophenylpropylbenzimidazolylazabicycloalkanes and related compounds as CCR5 receptor modulators.
IN Armour, Duncan Robert; Price, David Anthony; Stammen, Blanda Luzia Christa; Wood, Anthony; Perros, Manoussos; Edwards, Martin Paul
PA Pfizer Ltd., UK; Pfizer, Inc.
SO PCT Int. Appl., 205 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	WO 2000038680	A1	20000706	WO 1999-IB2048	19991223
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6586430	B1	20030701	US 1999-452578	19991201
	TW 577888	B	20040301	TW 1999-88121100	19991202
	CA 2350073	AA	20000706	CA 1999-2350073	19991223
	EP 1140085	A1	20011010	EP 1999-959624	19991223
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	BR 9917007	A	20011030	BR 1999-17007	19991223
	TR 200101793	T2	20011221	TR 2001-200101793	19991223
	EE 200100345	A	20021216	EE 2001-345	19991223
	AU 763644	B2	20030731	AU 2000-16751	19991223
	NZ 511794	A	20031031	NZ 1999-511794	19991223
	JP 3602795	B2	20041215	JP 2000-590634	19991223
	ZA 2001004211	A	20020114	ZA 2001-4211	20010523
	ZA 2001004254	A	20021101	ZA 2001-4254	20010524
	HR 2001000468	A1	20030228	HR 2001-468	20010619
	NO 2001003183	A	20010808	NO 2001-3183	20010625
	BG 105721	A	20020228	BG 2001-105721	20010720
	JP 2004099618	A2	20040402	JP 2003-358714	20031020
PRAI	GB 1998-28420	A	19981223		
	GB 1999-21375	A	19990910		
	GB 1999-22009	A	19990918		
	JP 2000-591036	A3	19991201		
	WO 1999-IB2048	W	19991223		

OS MARPAT 133:89523

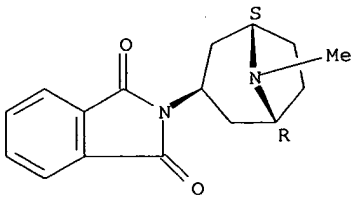
AB RaRbRcRd [Ra = specified (substituted) arylheterocyclyl, amidoaryl, amidoheterocyclyl; Rb = specified (substituted) Et bridging unit; Rc = specified (substituted) azabicyclyl; Rd = specified (substituted) imidazolyl, pyrazolyl, heterocyclyl, amide, carbamate, urea moiety], were prepared as CCR5 receptor modulators (no data). Thus, N-(3-oxo-1-phenylpropyl)cyclobutanecarboxamide (preparation given), exo-1-(8-azabicyclo[3.2.1]oct-3-yl)-2-methyl-1H-benzimidazole (preparation given), and Na(AcO)3BH were stirred 24 h in CH2Cl2/HOAc to give N-[3-[3-exo-(2-methyl-1H-benzimidazol-1-yl)-8-azabicyclo[3.2.1]oct-8-yl]-1-phenylpropyl]cyclobutanecarboxamide dihydrochloride.

IT **280761-95-7P 280762-26-7P 280762-27-8P 280762-51-8P 280768-46-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of acylaminophenylpropylbenzimidazolylazabicycloalkanes and related compds. as CCR5 receptor modulators)

RN 280761-95-7 CAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 2-[(3-exo)-8-methyl-8-azabicyclo[3.2.1]oct-3-yl]- (9CI) (CA INDEX NAME)

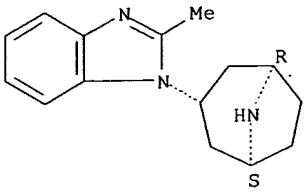
Relative stereochemistry.



RN 280762-26-7 CAPLUS

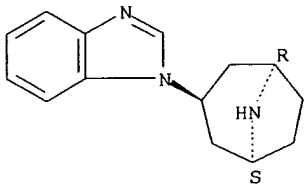
CN 8-Azabicyclo[3.2.1]octane, 3-(2-methyl-1H-benzimidazol-1-yl)-, (3-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



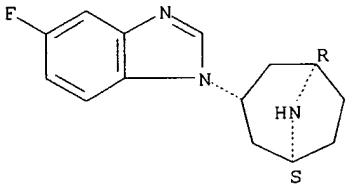
RN 280762-27-8 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1H-benzimidazol-1-yl)-, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



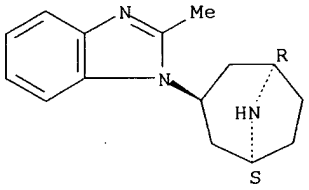
RN 280762-51-8 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(5-fluoro-1H-benzimidazol-1-yl)-, (3-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 280768-46-9 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2-methyl-1H-benzimidazol-1-yl)-, dihydrochloride, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



●2 HCl

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

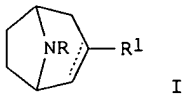
L21 ANSWER 24 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:384193 CAPLUS
DN 133:30663
TI Preparation of 8-azabicyclo[3.2.1]oct-2-ene and -octane derivatives as cholinergic ligands at the nicotinic Acetyl Choline Receptors (nAChR)
IN Peters, Dan; Olsen, Gunnar M.; Nielsen, Simon Feldbaek; Nielsen, Elsebet Ostergaard

10726680

PA Neurosearch A/S, Den.
SO PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000032600	A1	20000608	WO 1999-DK661	19991126
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2342621	AA	20000608	CA 1999-2342621	19991126
EP 1133494	A1	20010919	EP 1999-973031	19991126
EP 1133494	B1	20040218		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002531456	T2	20020924	JP 2000-585242	19991126
AU 761055	B2	20030529	AU 2000-13761	19991126
NZ 510287	A	20030530	NZ 1999-510287	19991126
EP 1382605	A2	20040121	EP 2003-22707	19991126
EP 1382605	A3	20040915		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
AT 259804	E	20040315	AT 1999-973031	19991126
US 2002035122	A1	20020321	US 2001-864367	20010525
US 6680328	B2	20040120		
US 2004116703	A1	20040617	US 2003-726680	20031204
PRAI DK 1998-1570	A	19981127		
EP 1999-973031	A3	19991126		
WO 1999-DK661	W	19991126		
US 2001-864367	A3	20010525		

OS MARPAT 133:30663
GI



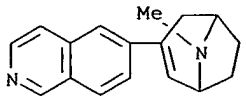
I

AB The title compds. [I; R = H, alkyl, alkenyl, etc.; R1 = COR2, (un)substituted mono- or polycyclic aryl, (un)substituted (un)saturated 5-6 membered heterocyclyl, etc.; R2 = H, alkyl, alkenyl, etc.] and their salts which are found to be cholinergic ligands at the nicotinic Acetyl Choline Receptors (no data) and may be useful for the treatment of diseases or disorders as diverse as those related to the cholinergic system of the central nervous system (CNS), diseases or disorders related to smooth muscle contraction, endocrine diseases or disorders, diseases or disorders related to neurodegeneration, diseases or disorders related to inflammation, pain, and withdrawal symptoms caused by the termination of abuse of chemical substances, were prepared E.g., a 2-step synthesis of (±)-8-azabicyclo[3.2.1]oct-2-ene I.fumarate [R = Me; R1 = 6-methoxy-2-naphthyl] was given. Compds. I may also be useful as radioligands for in vivo receptor imaging (neuroimaging).

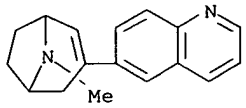
IT **273403-88-6P 273403-89-7P 273403-90-0P**
273403-91-1P 273403-92-2P 273403-94-4P
273403-95-5P 273403-96-6P 273403-97-7P
273403-98-8P 273403-99-9P 273404-00-5P
273404-01-6P 273404-02-7P 273404-03-8P
273404-05-0P 273404-06-1P 273404-07-2P
273404-08-3P 273404-09-4P 273404-10-7P
273404-11-8P 273404-33-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 8-azabicyclo[3.2.1]oct-2-ene and -octane derivs. as

cholinergic ligands at the nicotinic Acetyl Choline Receptors (nAChR))

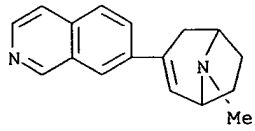
RN 273403-88-6 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(6-isoquinolinyl)-8-methyl- (9CI) (CA INDEX NAME)



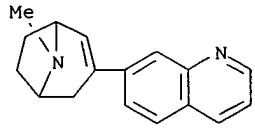
RN 273403-89-7 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 8-methyl-3-(6-quinolinyl)- (9CI) (CA INDEX NAME)



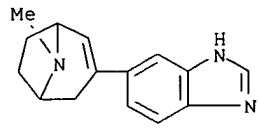
RN 273403-90-0 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(7-isoquinolinyl)-8-methyl- (9CI) (CA INDEX NAME)



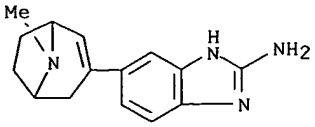
RN 273403-91-1 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 8-methyl-3-(7-quinolinyl)- (9CI) (CA INDEX NAME)



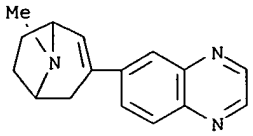
RN 273403-92-2 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(1H-benzimidazol-5-yl)-8-methyl- (9CI) (CA INDEX NAME)



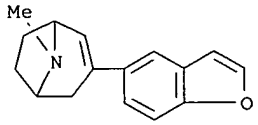
RN 273403-94-4 CAPLUS
CN 1H-Benzimidazol-2-amine, 5-(8-methyl-8-azabicyclo[3.2.1]oct-2-en-3-yl)- (9CI) (CA INDEX NAME)



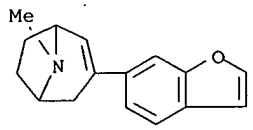
RN 273403-95-5 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 8-methyl-3-(6-quinoxalinyl)- (9CI) (CA INDEX NAME)



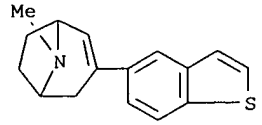
RN 273403-96-6 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(5-benzofuranyl)-8-methyl- (9CI) (CA INDEX NAME)



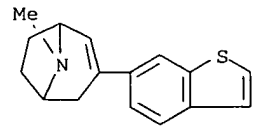
RN 273403-97-7 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(6-benzofuranyl)-8-methyl- (9CI) (CA INDEX NAME)



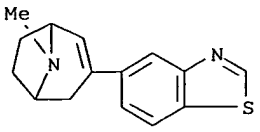
RN 273403-98-8 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-benzo[b]thien-5-yl-8-methyl- (9CI) (CA INDEX NAME)



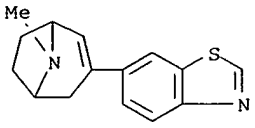
RN 273403-99-9 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-benzo[b]thien-6-yl-8-methyl- (9CI) (CA INDEX NAME)



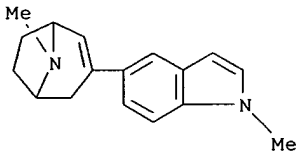
RN 273404-00-5 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(5-benzothiazolyl)-8-methyl- (9CI) (CA INDEX NAME)



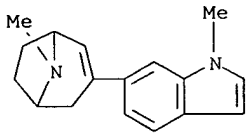
RN 273404-01-6 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(6-benzothiazolyl)-8-methyl- (9CI) (CA INDEX NAME)



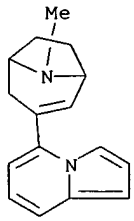
RN 273404-02-7 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 8-methyl-3-(1-methyl-1H-indol-5-yl)- (9CI) (CA INDEX NAME)



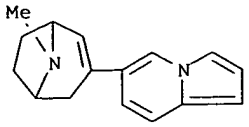
RN 273404-03-8 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 8-methyl-3-(1-methyl-1H-indol-6-yl)- (9CI) (CA INDEX NAME)



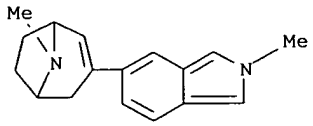
RN 273404-05-0 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(5-indolizinyl)-8-methyl- (9CI) (CA INDEX NAME)



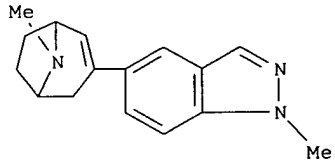
RN 273404-06-1 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(6-indolizinyl)-8-methyl- (9CI) (CA INDEX NAME)



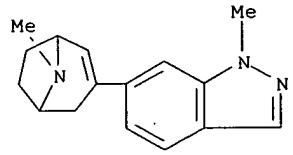
RN 273404-07-2 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 8-methyl-3-(2-methyl-2H-isoindol-5-yl)- (9CI) (CA INDEX NAME)



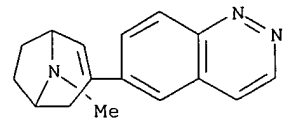
RN 273404-08-3 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 8-methyl-3-(1-methyl-1H-indazol-5-yl)- (9CI) (CA INDEX NAME)



RN 273404-09-4 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 8-methyl-3-(1-methyl-1H-indazol-6-yl)- (9CI) (CA INDEX NAME)

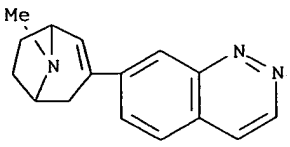


RN 273404-10-7 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(6-cinnolinyl)-8-methyl- (9CI) (CA INDEX NAME)

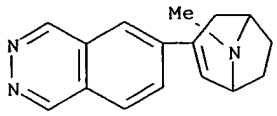


RN 273404-11-8 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(7-cinnolinyl)-8-methyl- (9CI) (CA INDEX NAME)

10726680



RN 273404-33-4 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 8-methyl-3-(6-phthalazinyl)- (9CI) (CA INDEX NAME)

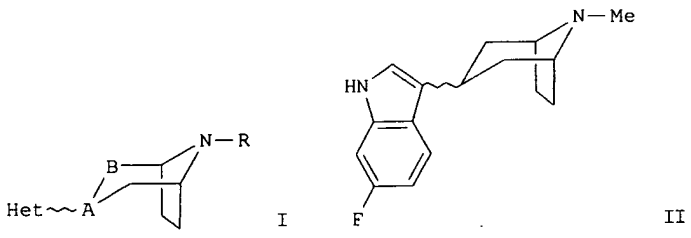


RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 25 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:811082 CAPLUS
DN 132:49887
TI Preparation of 3-(bicyclic-heteroaryl)-8-azabicyclo[3.2.1]oct-2-enes and -octanes for inhibition of serotonin reuptake
IN Audia, James Edmund; McDaniel, Stacey Leigh; Nissen, Jeffrey Scott
PA Eli Lilly and Company, USA
SO PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9965492	A1	19991223	WO 1999-US12602	19990604
	W: AE, AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2335336	AA	19991223	CA 1999-2335336	19990604
	AU 9948190	A1	20000105	AU 1999-48190	19990604
	JP 2002518331	T2	20020625	JP 2000-554372	19990604
	US 6107307	A	20000822	US 1999-326924	19990607
	EP 969005	A1	20000105	EP 1999-304680	19990616
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI	US 1998-89951P	P	19980619		
	WO 1999-US12602	W	19990604		

OS MARPAT 132:49887
GI



I II

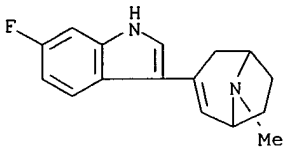
AB The invention provides 3-(bicyclic-heteroaryl)-8-azabicyclo[3.2.1]oct-2-enes and -octanes I, which are useful for the inhibition of serotonin

reuptake in mammals [wherein A-B = C:CH or CHCH2; R = H, or C1-C4 substituent; Het = bicyclic heteroaryl optionally substituted with 1-2 of H, halo, C1-C4 alkyl, C3-C6 cycloalkyl, C1-C4 alkoxy, cyano, nitro, carboxamido, CF3, or OH; and pharmaceutically acceptable salts thereof]. The compds. are selective inhibitors of serotonin reuptake, and as such are useful as antidepressants, etc. Prepns. of several compds. I and intermediates (some prophetic) are given. For instance, condensation of 6-fluoroindole with tropinone in AcOH in the presence of H3PO4, and hydrogenation of the resultant azabicyclooctene derivative, gave azabicyclooctane derivative II. In a paroxetine binding assay, representative compds. I inhibited serotonin reuptake potently, with activity in some cases in the low nanomolar range (no addnl. data).

IT **252744-99-3P**, 3-(6-Fluoroindol-3-yl)-8-methyl-8-azabicyclo[3.2.1]oct-2-ene
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(target compound; preparation of (bicycloheteroaryl)azabicyclooctenes and -octanes as serotonin reuptake inhibitors)

RN 252744-99-3 CAPLUS

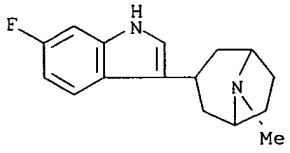
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(6-fluoro-1H-indol-3-yl)-8-methyl- (9CI) (CA INDEX NAME)



IT **252745-00-9P**, 3-(6-Fluoroindol-3-yl)-8-methyl-8-azabicyclo[3.2.1]octane
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(target compound; preparation of (bicycloheteroaryl)azabicyclooctenes and -octanes as serotonin reuptake inhibitors)

RN 252745-00-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane, 3-(6-fluoro-1H-indol-3-yl)-8-methyl- (9CI) (CA INDEX NAME)

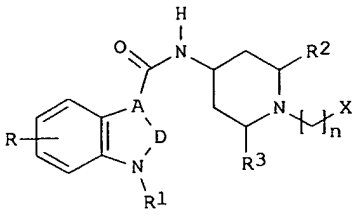


RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

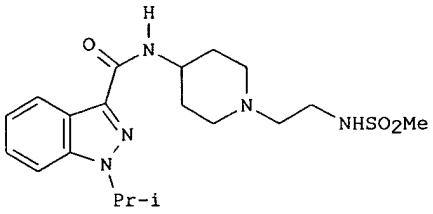
L21 ANSWER 26 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:246879 CAPLUS
DN 130:296684
TI Preparation of indazole- and 2-oxobenzamidazole-3-carboxamides as 5-HT4 agonists and antagonists
IN Cohen, Marlene Lois; Schaus, John Mehnert; Thompson, Dennis Charles
PA Eli Lilly and Company, USA
SO Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 908459	A1	19990414	EP 1998-308069	19981005
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,				

SI, LT, LV, FI, RO
US 6069152 A 20000530 US 1997-946495 19971007
CA 2304826 AA 19990415 CA 1998-2304826 19980924
WO 9917772 A1 19990415 WO 1998-US19992 19980924
W: AL, AM, AT, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
JP 2001518504 T2 20011016 JP 2000-514643 19980924
US 6117882 A 20000912 US 1999-338707 19990623
PRAI US 1997-946495 A 19971007
WO 1998-US19992 W 19980924
OS MARPAT 130:296684
GI



I



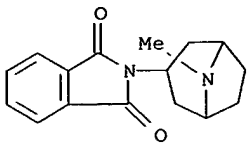
II

AB The title compds. [I; AD = C:N,NC:O; n = 1-5; R = H, halo, alkyl, etc.; R1 = H, alkyl, (un)substituted cycloalkyl; R2, R3 = H; R2R3 taken together form a bridge of 1-4 methylene units; X = OR4, NR4R5; R4 = H, alkyl, (un)substituted cycloalkyl, etc.; R5 = H; NR4R5 = pyrrolidino, piperazino, piperidino, etc.], antagonists and partial agonists for the serotonin receptor 5-HT4 which are useful for treatment of disorders caused by or affected by dysfunction of the 5-HT4 receptor such as anxiety, pain, depression, schizophrenia, memory disorders, dementia, irritable bowel syndrome, nausea, gastroesophageal reflux disease, dyspepsia, gastrointestinal motility disorders, constipation, atrial fibrillation, arrhythmias, tachycardia, urinary retention, urinary incontinence, or pain on urination, were prepared and formulated. E.g., methanesulfonylation of N-[1-(2-aminoethyl)piperidin-4-yl]-1-isopropylindazole-3-carboxamide (preparation given) afforded 60% II. Compds. I reduced the observed relaxations of esophagus smooth muscle (of rats) at ≤ 10 μM.

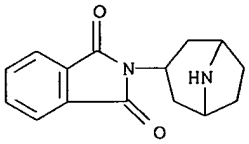
IT **223261-76-5P 223261-78-7P 223261-98-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of indazole- and 2-oxobenzamidazole-3-carboxamides as 5-HT4 agonists and antagonists)

RN 223261-76-5 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 2-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)- (9CI) (CA INDEX NAME)

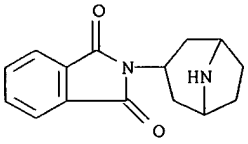
10726680



RN 223261-78-7 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 2-(8-azabicyclo[3.2.1]oct-3-yl)- (9CI) (CA INDEX NAME)



RN 223261-98-1 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 2-(8-azabicyclo[3.2.1]oct-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

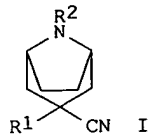
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 27 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:352836 CAPLUS
DN 129:27892
TI Preparation and insecticidal, acaricidal, and nematocidal activities of bicyclic amine derivatives
IN Urch, Christopher John; Lewis, Terence; Sunley, Raymond Leo
PA Zeneca Ltd., UK
SO PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9822463	A1	19980528	WO 1997-GB2990	19971030
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2269917	AA	19980528	CA 1997-2269917	19971030
	AU 9747893	A1	19980610	AU 1997-47893	19971030
	EP 942909	A1	19990922	EP 1997-910547	19971030
	EP 942909	B1	20020612		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
	CN 1237973	A	19991208	CN 1997-199806	19971030
	BR 9713120	A	20000411	BR 1997-13120	19971030
	JP 2001504477	T2	20010403	JP 1998-523305	19971030
	AT 219080	E	20020615	AT 1997-910547	19971030

	ES 2174230	T3	20021101	ES 1997-910547	19971030
	PT 942909	T	20021129	PT 1997-910547	19971030
	US 5849754	A	19981215	US 1997-969634	19971113
	MX 9904442	A	20000228	MX 1999-4442	19990513
	KR 2000057147	A	20000915	KR 1999-704421	19990519
PRAI	GB 1996-24114	A	19961120		
	WO 1997-GB2990	W	19971030		

OS MARPAT 129:27892
GI



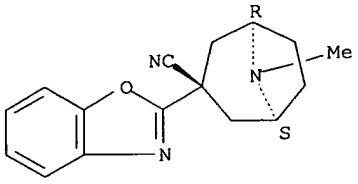
I

AB Bicyclic amine derivs. I [R1 = optionally substituted 5-membered heterocyclic ring system containing from 1 to 3 heteroatoms individually selected from nitrogen, oxygen and sulfur atoms, and at least one unsatn. (double bond) between adjacent atoms in the ring; R2 = hydrogen, cyano alkyl, aryl, heteroaryl, aralkyl, heteroarylalkyl, alkenyl, aralkenyl, alkynyl, alkoxycarbonyl, alkanesulfonyl, arenesulfonyl, alkenyloxycarbonyl, aralkyloxycarbonyl, aryloxycarbonyl, heterocyclylalkyl, carbamyl, dithiocarboxyl, XR3 (X = oxygen, NR4); R3, R4 = hydrogen, alkyl, aryl, heteroaryl, aralkyl, heteroarylalkyl, alkenyl, aralkenyl, alkynyl, heterocyclylalkyl, alkoxycarbonyl or carboxylic acyl], useful as insecticides, acaricides, and nematocides, were prepared

IT **208115-12-2P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and insecticidal, acaricidal, and nematocidal activities of bicyclic amine derivs.)

RN 208115-12-2 CAPLUS
CN 8-Azabicyclo[3.2.1]octane-3-carbonitrile, 3-(2-benzoxazolyl)-8-methyl-, (3-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



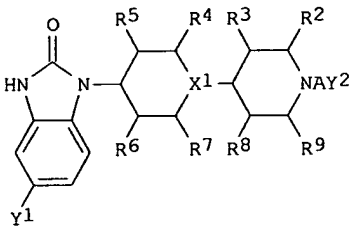
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 28 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:331566 CAPLUS
DN 129:41133
TI Preparation of 1,3-dihydro-1-[1-(1-heteroarylpiperidin-4-yl)piperidin-4-yl]-2H-benzimidazolones as muscarine antagonists
IN Thompson, Wayne J.; Ransom, Richard W.; Mallorga, Pierre; Sugrue, Michael F.
PA Merck and Co., Inc., USA
SO U.S., 15 pp.
CODEN: USXXAM
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5756508	A	19980526	US 1996-736704	19961028

10726680

PRAI US 1996-736704 19961028
OS MARPAT 129:41133
GI



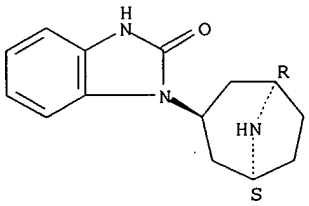
I

AB 1,3-Dihydro-1-[1-(1-heteroarylpiperidin-4-yl)piperidin-4-yl]-2H-benzimidazolones I [R2-R9 = H, alkyl, halo, amino, etc.; Y1 = H, halo, dialkylamino, etc.; Y2 = heterocyclyl; A = CHR1, CR12 with R1 = alkyl, alkoxy, aryl, heteroaryl, heterocyclyl; X1 = N, CN] were prepared E.g., reaction of 1-(1R-(5-pyrimidinyl)ethyl)-4-oxopiperidine and trans-1-(3-methyl-4-piperidinyl)benzimidazol-2H-one gave (3'R,4'R,1'''R and 3'S,4'S,1'''R)-1,3-dihydro-1-{1'-[1''-(1'''-(5''''-pyrimidinyl)-1'''-ethyl)piperidin-4''-yl]-3'-methylpiperidin-4'-yl}-2H-benzimidazol-2-one. These compds. are endowed with antimuscarinic activity and are useful in the treatment and/or prevention of myopia.

IT **208046-19-9P 208171-85-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of [(heteroarylpiperidinyl)piperidinyl]benzimidazolones as muscarinic antagonists)

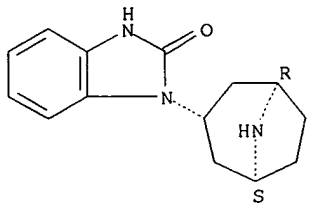
RN 208046-19-9 CAPLUS
CN 2H-Benzimidazol-2-one, 1-(3-endo)-8-azabicyclo[3.2.1]oct-3-yl-1,3-dihydro-(9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 208171-85-1 CAPLUS
CN 2H-Benzimidazol-2-one, 1-(3-exo)-8-azabicyclo[3.2.1]oct-3-yl-1,3-dihydro-(9CI) (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 29 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:429535 CAPLUS
DN 127:50657

10726680

TI Preparation of 1-(1,4'-bipiperidin-4-yl)-2-benzimidazolones and analogs as muscarinic antagonists

IN Thompson, Wayne J.; Ransom, Richard W.; Mallorga, Pierre; Sugrue, Michael F.

PA Merck and Co., Inc., USA; Thompson, Wayne J.; Ransom, Richard W.; Mallorga, Pierre; Sugrue, Michael F.

SO PCT Int. Appl., 51 pp.
CODEN: PIXXD2

DT **Patent**

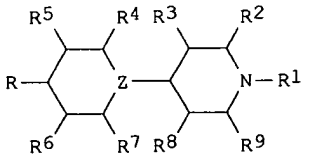
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9716192	A1	19970509	WO 1996-US17446	19961028
	W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9675286	A1	19970522	AU 1996-75286	19961028
PRAI	US 1995-7098P	P	19951031		
	GB 1996-3904	A	19960223		
	WO 1996-US17446	W	19961028		

OS MARPAT 127:50657

GI



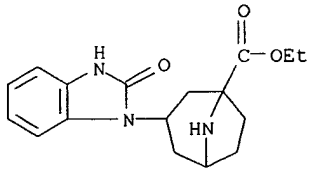
I

AB Title compds. [I; R = (un)substituted 1,3-dihydro-2-oxo-2H-benzimidazol-1-yl; R1 = AY2; A = (un)substituted alkylene, CO, etc.; R2-R9 = H, halo, alkyl, alkoxy, etc.; Y2 = heterocyclyl; Z = N or C (sic)] were prepared Thus, 1-[(R)-1-(5-pyrimidinyl)ethyl]-4-oxopiperidine was reductively aminated by trans-1-(3-methyl-4-piperidinyl)-2H-benzimidazol-2-one (preparation each given) to give I [R = 1,3-dihydro-2-oxo-2H-benzimidazol-1-yl, R1 = 1-(5-pyrimidinyl)ethyl, R2-R9 = H]. Data for biol. activity of I were given.

IT **190906-95-7P 190906-96-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 1-(1,4'-bipiperidin-4-yl)-2-benzimidazolones and analogs as muscarinic antagonists)

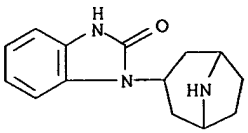
RN 190906-95-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-1-carboxylic acid, 3-(2,3-dihydro-2-oxo-1H-benzimidazol-1-yl)-, ethyl ester (9CI) (CA INDEX NAME)



RN 190906-96-8 CAPLUS

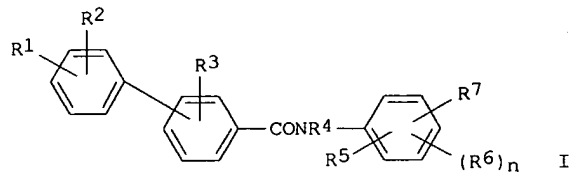
CN 2H-Benzimidazol-2-one, 1-(8-azabicyclo[3.2.1]oct-3-yl)-1,3-dihydro- (9CI) (CA INDEX NAME)



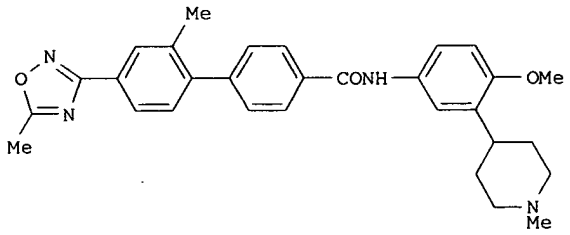
L21 ANSWER 30 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1996:724180 CAPLUS
DN 126:8121
TI Preparation of N-phenylbiphenylcarboxamide derivatives as 5HT1D antagonists
IN Gaster, Laramie Mary; Mulholland, Keith Raymond
PA Smithkline Beecham Plc, UK
SO PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9631508	A1	19961010	WO 1996-EP1465	19960402
	W: JP, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 819126	A1	19980121	EP 1996-910020	19960402
	R: BE, CH, DE, ES, FR, GB, IT, LI, NL, FI				
	JP 11503143	T2	19990323	JP 1996-529986	19960402
	US 5919932	A	19990706	US 1997-930848	19971007
PRAI	GB 1995-7203	A	19950407		
	WO 1996-EP1465	W	19960402		

OS MARPAT 126:8121
GI



I



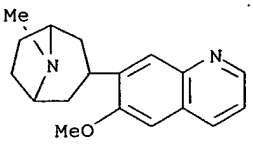
II

AB Novel biphenyl amide derivs. [I; R1 = H, halo, C1-6 (hydroxy)alkyl or (hydroxy)alkoxy, C3-6 cycloalkyl, C1-6 alkylcarbonyl, HO, C1-6 alkoxy-C1-6 alkyl, acyl, NO2, CF3, cyano, S(O)nR9 (n = 0, 1,2), SO2NR10R11, CO2R10, NR10SO2R11, CONR10R11, (un)substituted 5- to 7-membered heterocyclyl containing 1-3 heteroatoms selected from O, N, and S, etc.; wherein R9 - R11 = H, C1-6 alkyl; R2, R3 = H, halo, C1-6 alkyl, C3-6 cycloalkyl or cycloalkenyl, C1-6 alkoxy, C1-6 hydroxyalkyl, C1-6 alkoxy-C1-6 alkyl, acyl, aryl, acyloxy, OH, NO2, CF3, cyano, CO2 R10, CONR10R11, NR10R11; wherein R10, R11 = same as above; R4 = H, C1-6 alkyl; R5 = H, halo, HO, C1-6 alkyl or alkoxy; or R4 and R5 together form (CR12R13)q or (CR12R13)rD; wherein q = 2,3,4; R12, R13 = H, C1-6 alkyl; r = 0, 1-3; D = O, S, CR12:CR13; R6 = 5- to 7-membered saturated or partially saturated heterocyclyl containing 1-3 heteroatoms selected from O, N, and S, (un)substituted [6.6] or [6.5] bicyclic ring containing a N atom and optionally a further heteroatom selected from O, N, and S], which are 5HT1D antagonists and useful for the treatment of central nervous system

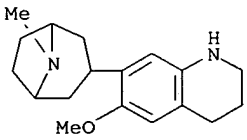
(CNS) disorders, are prepared Thus, 2'-methyl-4'-(5-methyl-1,2,4-oxadiazol-3-yl)biphenyl-4-carboxylic acid was stirred with oxalyl chloride in the presence of one drop of DMF for 2 h to the crude acid chloride, which was condensed with 4-(5-amino-2-methoxyphenyl)-1-methylpiperidine (preparation given) in the presence of Et3N in CH2Cl2 to give the title compound, N-(piperidinylphenyl)oxadiazolylbiphenylcarboxamide derivative (II).

IT **183810-35-7P 183810-36-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of N-phenylbiphenylcarboxamide derivs. as 5HT1D antagonists for treatment of central nervous system disorders)

RN 183810-35-7 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(6-methoxy-7-quinolinyl)-8-methyl- (9CI) (CA INDEX NAME)



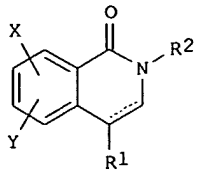
RN 183810-36-8 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 8-methyl-3-(1,2,3,4-tetrahydro-6-methoxy-7-quinolinyl)- (9CI) (CA INDEX NAME)



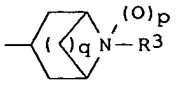
L21 ANSWER 31 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1996:169236 CAPLUS
DN 124:317007
TI Azabicyclo isoquinolinone and dihydroisoquinolinone 5-HT3 receptor antagonists
IN Berger, Jacob; Clark, Robin D.
PA Syntex (U.S.A.) Inc., USA
SO U.S., 17 pp.
CODEN: USXXAM
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5491148	A	19960213	US 1991-692407	19910426
PRAI	US 1991-692407		19910426		

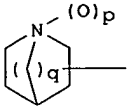
OS MARPAT 124:317007
GI



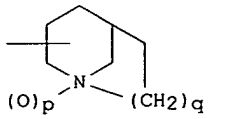
I



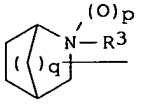
II



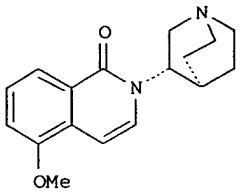
III



IV



V



VI

AB Isoquinolinones and dihydroisoquinolinones I in which X and Y are independently selected from hydrogen, halogen, hydroxy, lower alkoxy, lower alkyl, nitro, amino, aminocarbonyl, (lower alkyl)amino, di(lower alkyl)amino and (lower alkanoyl)amino; R1 is hydrogen, lower alkyl, Ph or halogen; R2 is a group selected from II-V in which: p is 0 or 1; q is 1, 2 or 3; and R3 is C1-7 alkyl, C3-8 cycloalkyl, C3-8 cycloalkyl-C1-2 alkyl, or a group (CH2)tR4 where t is 1 or 2 and R4 is thienyl, pyrrolyl, or furyl, each optionally further substituted by one or two substituents being C1-6 alkyl, C1-6 alkoxy, trifluoromethyl or halogen, or is Ph optionally substituted by one or two substituents being C1-4 alkoxy, trifluoromethyl, halogen, nitro, carboxy, esterified carboxy, or C1-4 alkyl optionally substituted by hydroxy, C1-4 alkoxy, carboxy, esterified carboxy or in vivo hydrolyzable acyloxy; and the dashed line denotes an optional bond, except that the bond is present when R1 is halogen or R2 is a group II, are 5-HT3 receptor antagonists (pIC50 > 6). E.g., cyclization of (S)-N-(1-azabicyclo[2.2.2]oct-3-yl)-3-methoxy-2-methylbenzamide (preparation given) with n-BuLi/DMF afforded (S)-2-(1-azabicyclo[2.2.2]oct-3-yl)-5-methoxy-1(2H)-isoquinolinone (VI). Pharmaceutical formulations were given.

IT **149653-91-8P**

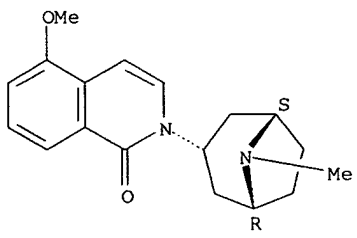
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(azabicyclo isoquinolinone and dihydroisoquinolinone 5-HT3 receptor antagonists)

RN 149653-91-8 CAPLUS

CN 1(2H)-Isoquinolinone, 5-methoxy-2-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L21 ANSWER 32 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN

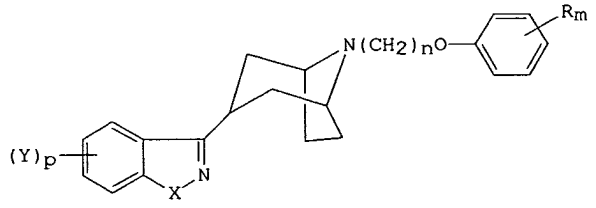
AN 1994:106994 CAPLUS

10726680

DN 120:106994
TI Preparation of heteroaryl-8-azabicyclo(3.2.1)octanes as antipsychotic agents, 5-HT3 receptor antagonists and inhibitors of the reuptake of serotonin
IN Glamkowski, Edward J.; Fink, David M.; Kurys, Barbara E.; Chiang, Yulin
PA Hoechst-Roussel Pharmaceuticals Inc., USA
SO U.S., 15 pp. Cont.-in-part of U.S. Ser. No. 650,144, abandoned.
CODEN: USXXAM
DT **Patent**
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5234931	A	19930810	US 1992-831027	19920204
	FI 9200435	A	19920805	FI 1992-435	19920131
	FI 111367	B1	20030715		
	KR 222774	B1	19991001	KR 1992-1588	19920201
	CA 2060573	AA	19920805	CA 1992-2060573	19920203
	CA 2060573	C	20020813		
	NO 9200438	A	19920805	NO 1992-438	19920203
	AU 9210605	A1	19920806	AU 1992-10605	19920203
	AU 641842	B2	19930930		
	HU 60494	A2	19920928	HU 1992-321	19920203
	HU 207863	B	19930628		
	ZA 9200753	A	19921028	ZA 1992-753	19920203
	JP 05059049	A2	19930309	JP 1992-17668	19920203
	JP 08009613	B4	19960131		
	HU 62295	A2	19930428	HU 1992-3977	19920203
	HU 217616	B	20000328		
	PL 169092	B1	19960531	PL 1992-293363	19920203
	AT 138377	E	19960615	AT 1992-101706	19920203
	ES 2089255	T3	19961001	ES 1992-101706	19920203
	IL 100861	A1	19970218	IL 1992-100861	19920203
	RU 2075479	C1	19970320	RU 1992-5010691	19920203
	CZ 284754	B6	19990217	CZ 1992-297	19920203
	US 5334599	A	19940802	US 1993-37134	19930325
	US 5340936	A	19940823	US 1993-37047	19930325
PRAI	US 1991-650144	B2	19910204		
	HU 1992-321	A3	19920203		
	US 1992-831027	A3	19920204		

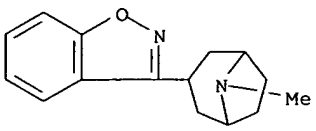
OS MARPAT 120:106994
GI



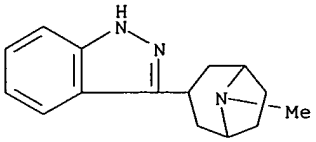
I

AB Title compds. I (X = O, S; Y = H, halo, alkoxy; p, m = 1,2; n = 2-4; R = H, halo, alkyl, alkoxy, HO, halo, H2N, alkylamino, O2N, alkylthio, F3CO, NC, F3C, alkylcarbonyl, (substituted) arylcarbonyl) or a salt, geometric or optical isomers thereof, showing the effects described in the title, are prepared Di-Et 1-(2-fluorophenyl)-1-methoxymethanephosphonate (preparation given) in THF was treated with BuLi and tropinone to give (2-fluorophenyl)(8-methyl-8-azabicyclo[3.2.1]octan-3-yl)methanone-HCl which was converted in 4 steps to give I (X = O, Rm = 3,4-(MeO)Ac, Yp = H, n = 4).HCl (II). In an assay for potential antidepressant activity which block serotonin uptake the IC50 of II was 0.027 μM.
IT **144062-26-0P 144062-29-3P 144062-31-7P**
144062-32-8P 144062-33-9P 144062-34-0P
144062-37-3P 144253-73-6P 144253-75-8P
144253-76-9P 144253-77-0P 152535-43-8P
152535-45-0P 152535-47-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of drug)
RN 144062-26-0 CAPLUS

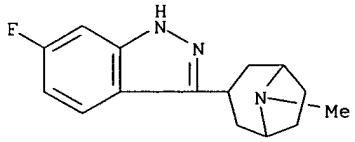
CN 8-Azabicyclo[3.2.1]octane, 3-(1,2-benzisoxazol-3-yl)-8-methyl- (9CI) (CA INDEX NAME)



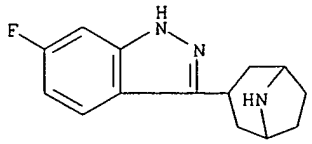
RN 144062-29-3 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1H-indazol-3-yl)-8-methyl- (9CI) (CA INDEX NAME)



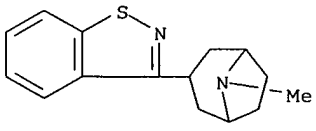
RN 144062-31-7 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(6-fluoro-1H-indazol-3-yl)-8-methyl- (9CI) (CA INDEX NAME)



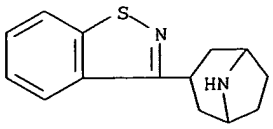
RN 144062-32-8 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(6-fluoro-1H-indazol-3-yl)- (9CI) (CA INDEX NAME)



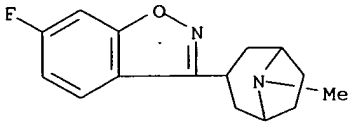
RN 144062-33-9 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1,2-benzisothiazol-3-yl)-8-methyl- (9CI) (CA INDEX NAME)



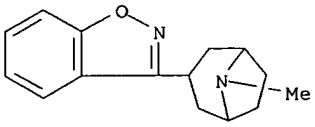
RN 144062-34-0 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1,2-benzisothiazol-3-yl)- (9CI) (CA INDEX NAME)



RN 144062-37-3 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(6-fluoro-1,2-benzisoxazol-3-yl)-8-methyl-
(9CI) (CA INDEX NAME)

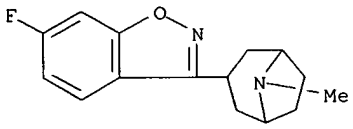


RN 144253-73-6 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1,2-benzisoxazol-3-yl)-8-methyl-,
monohydrochloride (9CI) (CA INDEX NAME)



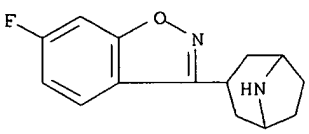
● HCl

RN 144253-75-8 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(6-fluoro-1,2-benzisoxazol-3-yl)-8-methyl-,
monohydrochloride (9CI) (CA INDEX NAME)



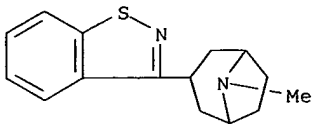
● HCl

RN 144253-76-9 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(6-fluoro-1,2-benzisoxazol-3-yl)-,
monohydrochloride (9CI) (CA INDEX NAME)



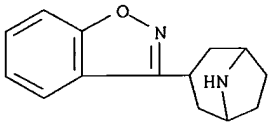
● HCl

RN 144253-77-0 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1,2-benzisothiazol-3-yl)-8-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 152535-43-8 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1,2-benzisoxazol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

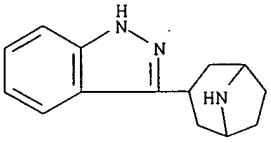


● HCl

RN 152535-45-0 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1H-indazol-3-yl)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

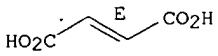
CRN 144062-30-6
CMF C14 H17 N3



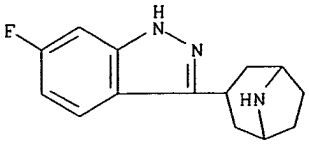
CM 2

CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.

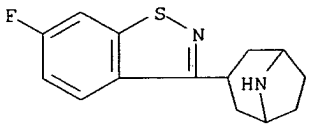


RN 152535-47-2 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(6-fluoro-1H-indazol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

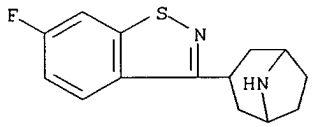
IT **152535-38-1P 152535-39-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as drug)
RN 152535-38-1 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(6-fluoro-1,2-benzisothiazol-3-yl)- (9CI) (CA INDEX NAME)



RN 152535-39-2 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(6-fluoro-1,2-benzisothiazol-3-yl)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

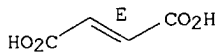
CRN 152535-38-1
CMF C14 H15 F N2 S



CM 2

CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.



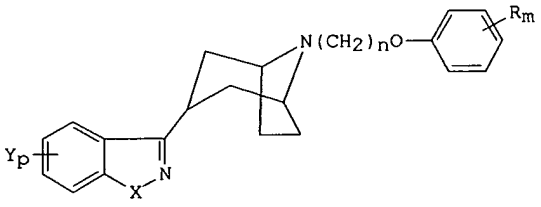
L21 ANSWER 33 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1993:7233 CAPLUS
DN 118:7233
TI N-(aryloxyalkyl)heteroaryl-8-azabicyclo[3.2.1]octanes, intermediates and a process for the preparation thereof and their use as medicaments
IN Glamkowski, Edward J.; Fink, David M.; Kurys, Barbara E.
PA Hoechst-Roussel Pharmaceuticals Inc., USA
SO Eur. Pat. Appl., 31 pp.
CODEN: EPXXDW
DT **Patent**

10726680

LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 498331	A1	19920812	EP 1992-101706	19920203
	EP 498331	B1	19960522		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT, SE				
	FI 9200435	A	19920805	FI 1992-435	19920131
	FI 111367	B1	20030715		
	KR 222774	B1	19991001	KR 1992-1588	19920201
	CA 2060573	AA	19920805	CA 1992-2060573	19920203
	CA 2060573	C	20020813		
	NO 9200438	A	19920805	NO 1992-438	19920203
	AU 9210605	A1	19920806	AU 1992-10605	19920203
	AU 641842	B2	19930930		
	HU 60494	A2	19920928	HU 1992-321	19920203
	HU 207863	B	19930628		
	ZA 9200753	A	19921028	ZA 1992-753	19920203
	JP 05059049	A2	19930309	JP 1992-17668	19920203
	JP 08009613	B4	19960131		
	HU 62295	A2	19930428	HU 1992-3977	19920203
	HU 217616	B	20000328		
	PL 169092	B1	19960531	PL 1992-293363	19920203
	AT 138377	E	19960615	AT 1992-101706	19920203
	ES 2089255	T3	19961001	ES 1992-101706	19920203
	IL 100861	A1	19970218	IL 1992-100861	19920203
	RU 2075479	C1	19970320	RU 1992-5010691	19920203
	CZ 284754	B6	19990217	CZ 1992-297	19920203
PRAI	US 1991-650144	A	19910204		
	HU 1992-321	A3	19920203		

OS MARPAT 118:7233
GI

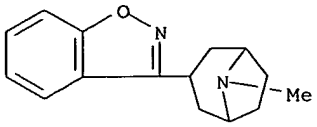


I

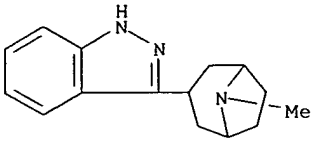
AB The title compds. I (X = O, S, NH; Y = H, halo, alkoxy; p = 1, 2; n = 2-4; R = H, alkyl, alkoxy, HO, halo, H2N, alkylamino, O2N, alkylthio, F3CO, cyano, F3C, alkylcarbonyl, R1-substituted aryl; R1 = H, alkyl, alkoxy, halo, HO, HO2C, alkylamino, O2N, alkylthio, cyano, F3C; m = 1,2) salts and isomers thereof, useful as antipsychotics and antidepressants, are prepared BF3.Et2O was added to 2,4-F2C6H3CH(OMe)2 and P(OEt)3 in CH2Cl2 to give a di-Et phosphonate derivative which was condensed with tropinone, oximated, cyclized to a benzisoxazolylazabicyclooctane derivative, demethylated, and heated with 4,3-[Cl(CH2)3O](MeO)C6H3COMe and HCl/EtOH to give I.HCl (Yp = 6-F, X = O, n = 3, Rm = 2-MeO, 4-Ac) (II). Antipsychotic activity was determined by a climbing assay, in which the ED50 of II was 5.0 mg/kg, i.p.

IT **144062-26-0P 144062-29-3P 144062-30-6P**
144062-31-7P 144062-32-8P 144062-33-9P
144062-34-0P 144062-37-3P 144253-73-6P
144253-75-8P 144253-76-9P 144253-77-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of antidepressant and antipsychotic)

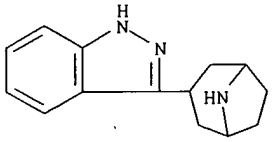
RN 144062-26-0 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1,2-benzisoxazol-3-yl)-8-methyl- (9CI) (CA INDEX NAME)



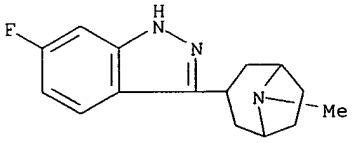
RN 144062-29-3 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1H-indazol-3-yl)-8-methyl- (9CI) (CA INDEX NAME)



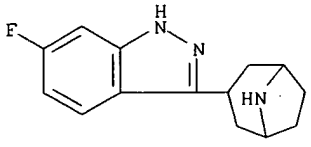
RN 144062-30-6 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1H-indazol-3-yl)- (9CI) (CA INDEX NAME)



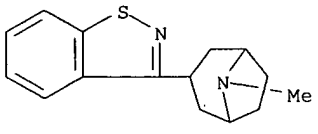
RN 144062-31-7 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(6-fluoro-1H-indazol-3-yl)-8-methyl- (9CI) (CA INDEX NAME)



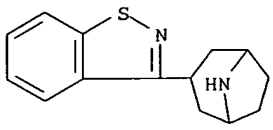
RN 144062-32-8 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(6-fluoro-1H-indazol-3-yl)- (9CI) (CA INDEX NAME)



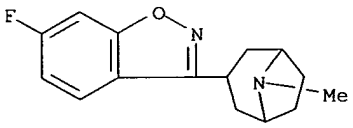
RN 144062-33-9 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1,2-benzisothiazol-3-yl)-8-methyl- (9CI) (CA INDEX NAME)



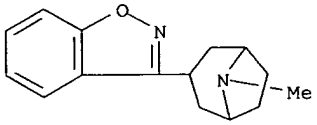
RN 144062-34-0 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1,2-benzisothiazol-3-yl)- (9CI) (CA INDEX NAME)



RN 144062-37-3 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(6-fluoro-1,2-benzisoxazol-3-yl)-8-methyl- (9CI) (CA INDEX NAME)

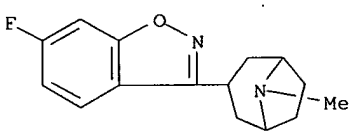


RN 144253-73-6 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1,2-benzisoxazol-3-yl)-8-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



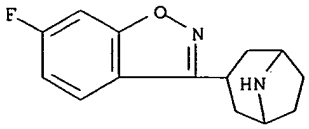
● HCl

RN 144253-75-8 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(6-fluoro-1,2-benzisoxazol-3-yl)-8-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



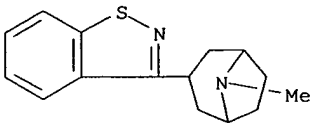
● HCl

RN 144253-76-9 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(6-fluoro-1,2-benzisoxazol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 144253-77-0 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(1,2-benzisothiazol-3-yl)-8-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

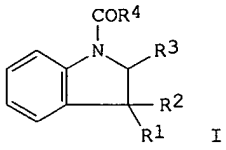


● HCl

L21 ANSWER 34 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1991:247135 CAPLUS
DN 114:247135
TI Preparation of indoles as serotonin antagonists
IN Kato, Masayuki; Ito, Kiyotaka; Takasugi, Hisashi
PA Fujisawa Pharmaceutical Co., Ltd., Japan
SO Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DT **Patent**
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 403882	A2	19901227	EP 1990-110742	19900607
	EP 403882	A3	19920102		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	CA 2017621	AA	19901223	CA 1990-2017621	19900528
	JP 03034978	A2	19910214	JP 1990-164449	19900621
PRAI	GB 1989-14493	A	19890623		
	GB 1990-9643	A	19900430		

OS MARPAT 114:247135
GI

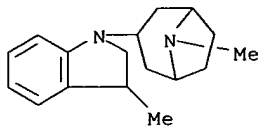


I

AB The title compds. I [R1 = alkyl; R2, R3 = H, alkyl, or R2R3 = bond; or R1R2 = alkylene and R3 = H; R4 = (substituted) azabicyclo(C5-12)alkyl(lower)alkyl or its N-oxide; a proviso is given] were prepared A mixture of 2,3-dihydro-3-methyl-1-[(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)acetyl]indole and 2,3-dichloro-5,6-dicyano-1,4-benzoquinone in CH2Cl2 was refluxed for 8 h to give I [R1 = Me; R2R3 = bond; COR4 = (8-methyl-8-azabicyclo[3.2.1]oct-3-yl)acetyl], which at 3.2 μg/kg gave 52.9% inhibition of the Bezold-Jarisch reflex in rats.

IT **133982-11-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

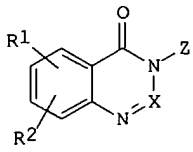
(Reactant or reagent)
(preparation and reaction of, in preparation of serotonin antagonist)
RN 133982-11-3 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 3-(2,3-dihydro-3-methyl-1H-indol-1-yl)-8-methyl- (9CI) (CA INDEX NAME)



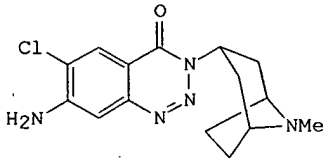
L21 ANSWER 35 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1990:7515 CAPLUS
DN 112:7515
TI Preparation of 3-(azabicycloalkyl)-3,4-dihydro-4-oxobenzotriazines and -quinazolines as 5-HT3 receptor antagonists
IN King, Francis David
PA Beecham Group PLC, UK
SO Eur. Pat. Appl., 23 pp.
CODEN: EPXXDW
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 315390	A2	19890510	EP 1988-310208	19881031
	EP 315390	A3	19900110		
	EP 315390	B1	19940720		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	US 4959367	A	19900925	US 1988-266122	19881102
	JP 01157978	A2	19890621	JP 1988-279207	19881104
PRAI	GB 1987-25840	A	19871104		
	GB 1988-3110	A	19880211		

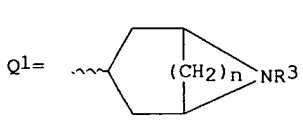
OS MARPAT 112:7515
GI

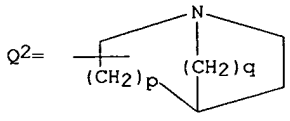


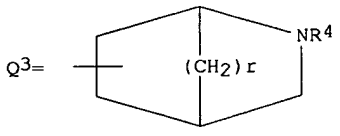
I



II







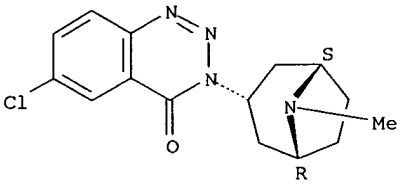
AB The title compds. [I; R1, R2 = H, OH, halo, CF3, NO2, C1-6 alkyl, C1-7 acyl(amino), C1-6 alkylsulfonyl or alkylsulfinyl, C1-6 alkoxy or alkylthio, (un)substituted amino(carbonyl), amino(sulfonyl); R1R2 = OCH2O, OCH2CH2O; R3, R4 = C1-4 alkyl; X = N, CH; Z = Q1-Q3; n = 2, 3; p = 1, 2; q, r = 1-3], with 5-HT3 receptor-antagonistic and gastric motility-enhancing activities, were prepared Reaction of 5-chloro-4-nitroanthranilic acid with COCl2 in THF, and treatment of the product with endo-3-aminotropane in DMF, gave 15% endo-N-(8-methyl-8-

azabicyclo[3.2.1]oct-3-yl)-2-amino-5-chloro-4-nitrobenzamide. This was cyclized by aqueous diazotization (60%) and the nitro group hydrogenated over Raney Ni to give 22% endo-3-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-7-amino-6-chloro-3,4-dihydro-4-oxobenzotriazine II. In anesthetized rats, II antagonized the 5-HT-evoked von Bezhold-Jarisch reflex with an ED50 of 0.17 μg/kg, i.v.

IT **123948-31-2P 123948-32-3P 123948-33-4P 123948-34-5P 123969-86-8P 123969-87-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as 5-HT3 receptor antagonist)

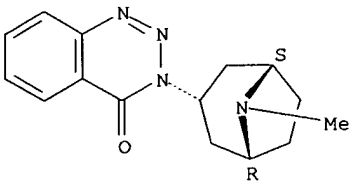
RN 123948-31-2 CAPLUS
CN 1,2,3-Benzotriazin-4(3H)-one, 6-chloro-3-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



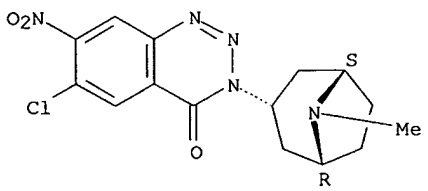
RN 123948-32-3 CAPLUS
CN 1,2,3-Benzotriazin-4(3H)-one, 3-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



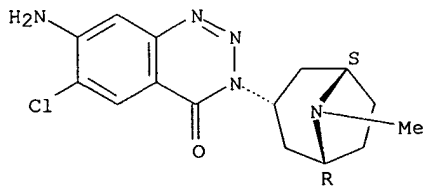
RN 123948-33-4 CAPLUS
CN 1,2,3-Benzotriazin-4(3H)-one, 6-chloro-3-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-7-nitro-, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



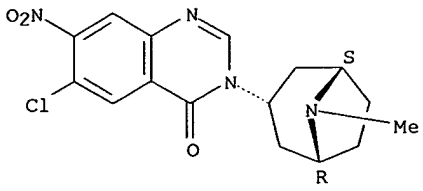
RN 123948-34-5 CAPLUS
CN 1,2,3-Benzotriazin-4(3H)-one, 7-amino-6-chloro-3-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



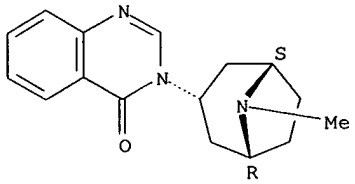
RN 123969-86-8 CAPLUS
CN 4(3H)-Quinazolinone, 6-chloro-3-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-7-nitro-, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 123969-87-9 CAPLUS
CN 4(3H)-Quinazolinone, 3-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-, endo- (9CI) (CA INDEX NAME)

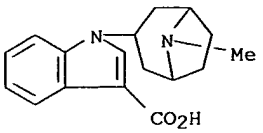
Relative stereochemistry.



L21 ANSWER 36 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1989:141571 CAPLUS
DN 110:141571
TI Gastrointestinal drugs containing H2 antihistaminic and serotoninergic neurotransmitter antagonists
IN Tyers, Michael Brian
PA Glaxo Group Ltd., UK
SO Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 275669	A1	19880727	EP 1987-311080	19871216
	EP 275669	B1	19920930		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 63277635	A2	19881115	JP 1987-318460	19871216
	AT 81016	E	19921015	AT 1987-311080	19871216
PRAI	GB 1986-30079	A	19861217		
	EP 1987-311080	A	19871216		

OS MARPAT 110:141571
AB Drug compns. for the treatment of gastrointestinal disorders in human or veterinary medicine (no data) comprise a gastric emptying-promoting 5-HT antagonist at 5-HT3 receptors and a histamine H2 receptor antagonist. A oral tablet comprised 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-4H-carbazol-4-one-HCl.2H2O 5.00, famotidine 20.00, microcryst. cellulose 75.00, lactose 49.25 and Mg stearate 0.75 mg.
IT **119812-28-1D**, esters
RL: BIOL (Biological study)
(drug composition containing, for treatment of gastric disorders)
RN 119812-28-1 CAPLUS
CN 1H-Indole-3-carboxylic acid, 1-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-, endo- (9CI) (CA INDEX NAME)



L21 ANSWER 37 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1960:11590 CAPLUS
DN 54:11590
OREF 54:2382f-i,2383a-f
TI 4-(1,5-Imino-3-cycloalkyl)-1-alkyl-2,3,4,5-tetrahydro-1,4-benzodiazepines
IN Archer, Sydney
PA Sterling Drug Inc.
SO Continuation-in-part of U.S. 2,845,427 (C.A. 53, 430h)
DT **Patent**
LA Unavailable
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2902490		19590901	US	

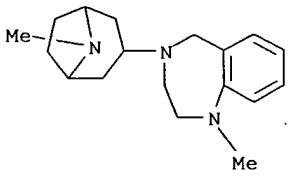
AB Compds. which exhibited ganglionic blocking effects in dogs and cats were prepared by the attachment to a 1,5-imino N-substituted cycloalkane at the 3-position, through an intervening polyvalent nonmetallic atom, of a basic tertiary amino alkylene group. The title compds., exhibiting the same ganglionic blocking effect, were prepared by heating certain of the above compds. with HCOOH and HCHO. Thus, a mixture of 51.5 g. 3-tropanone (I), 50.6 g. N-methyl-N-phenylethylenediamine, 2 g. PtO2, and 56 ml. anhydrous EtOH was shaken under H at 50 lb./sq. in. After 1 mole of H had been absorbed, the mixture was filtered, the filtrate concentrated, and distilled twice to give 27.2 g. 3-[2-phenyl(methyl)aminoethylamino]tropane (II), b0.1 167-73°. A mixture of 26.5 ml. 98% HCOOH in 500 ml. H2O, 29 g. II, and 10 ml. 37% HCHO was heated 15 hrs. on a steam bath, concentrated, dried azeotropically, and distilled to give 10 g. 1-methyl-4-(3-tropanyl)-2,3,4,5-tetrahydro-1,4-benzodiazepine (III), b0.6 155-65°. A solution of 7.5 g. III and 8.16 g. MeI in 35 ml. anhydrous EtOH was kept overnight at room temperature and the product recrystd. from H2O to give 5.2 g. 1-methyl-4-(3-tropanyl)-2,3,4,5-tetrahydro-1,4-benzodiazepine dimethiodide (IV), m. 264-7° (decomposition). Hofmann degradation of IV and preparation of the picrate gave 1-[(2-dimethylaminobenzyl)vinylamino]-3-dimethylamino-5-cycloheptene dipicrate, m. 193-4° (decomposition). 1-Methyl-4-(3-tropanyl)-2,3,4,5-tetrahydro-1,4-benzodiazepine diethiodide, prepared from the free base and EtI in EtOH, m. 208-10°. Prepared similarly to II were: 3-[2-phenyl(ethyl)aminoethylamino]tropane (V), b0.6 174-7°; 3-[2-(p-tolyl)methylaminoethylamino]tropane (VI), b0.3 164-73°, n23.5D 1.5532; and 3-[2-(p-methoxyphenyl)methylaminoethylamino]tropane (VII), b0.5 179-83°, n24D 1.5560. Prepared similarly to III were: 1-ethyl-4-(3-tropanyl)-2,3,4,5-tetrahydro-1,4-benzodiazepine (VIII), b0.5 174-8°; 1,7-dimethyl-4-(3-tropanyl)-2,3,4,5-tetrahydro-1,4-benzodiazepine (IX), b0.2 163°, picrate m. 230-1° (aqueous HCONMe2); 1-methyl-4-(3-tropanyl)-7-methoxy-2,3,4,5-tetrahydro-1,4-benzodiazepine, b0.1 180-5°, picrate m. 239-40° (aqueous HCONMe2). Prepared similarly to IV were: 1-ethyl-4(3-tropanyl)-2,3,4,5-tetrahydro-1,4-benzodiazepine dimethiodide, m. 269-71° (H2O) and 1-ethyl-4-(3-tropanyl)-2,3,4,5-tetrahydro-1,4-benzodiazepine 8-methiodide, m. 235-8°; 1,7-dimethyl-4-(3-tropanyl)-2,3,4,5-tetrahydro-1,4-benzodiazepine methiodide, m. 274-6° (EtOH). Treatment of 20 g. VIII with excess (20 g.) MeBr in 80 ml. MeOH gave 9.5 g. 1-ethyl-4-(3-tropanyl)-2,3,4,5-tetrahydro-1,4-benzodiazepine dimethobromide, m. 262.0-2.5° (decomposition) (aqueous MeOH). Treatment of VIII in CH3CN with EtI gave 1-ethyl-4-(3-tropanyl)-2,3,4,5-tetrahydro-1,4-benzodiazepine diethiodide, m. 253-4° (decomposition) (H2O). 2,5-Diethoxytetrahydrofuran (X) (160 g.) in 150 ml. H2O was stirred 2 hrs. at 48-50° with 0.13 ml. concentrated HCl, cooled to 25°, and 202 g. ethyl acetonedicarboxylate (XI) was added, followed by 100 ml. H2O and C6H5CH2NH2.HCl. The mixture was stirred overnight, treated with 250 ml. HCl, and 270 ml. H2O was distilled within 5.5 hrs. The mixture was filtered, the filtrate made alkaline with 250 ml. 35% NaOH, 500 g. K2CO3 added, the mixture extracted with Et2O, dried (CaSO4), concentrated, and distilled to give 8-benzylnortropanone, b0.4 134-7°, n25D 1.5526. Prepared similarly were: 8-(4-methoxybenzyl)nortropanone, b0.1 179-84°, n25D 1.5538, HCl salt m. 203-4° (decomposition) (EtOH); 8-(2,3-dimethoxybenzyl)nortropanone, b0.5 178-99°, HCl salt m.

201-2° (decomposition); 8-(2-chlorobenzyl)nortropanone-HCl, m. 211-13° (decomposition) (H2O). A solution of 36.2 g. X in 240 ml. H2O containing 0.6 ml. concentrated H2SO4 was warmed 15 min. on a steam bath, cooled, and added to a solution of 97 g. CO(CH2COOH)2, 146 g. NaOAc.3H2O, and 27 g. C6H5NH2 in 3.5 l. H2O. The mixture was kept overnight, filtered, the solid dissolved in 1 l. 5% HCl at 60°, cooled, made alkaline with NH4OH, filtered, and recrystd. from dilute MeOH to give 11.4 g. 8-phenylnortropanone, m. 107-9°. A mixture of 35 g. 2-phenyl(ethyl)aminoethylamine, 32 g. pseudopelletierine, 1 g. ZnCl2, and 200 ml. PhMe was refluxed 15 hrs., using a H2O separator to collect the H2O formed. The mixture was cooled, washed with 150 ml. 10% NaOH, extracted with Et2O, washed with 40% (NH4)2SO4, dried (K2CO3), and concentrated Absolute alc. was added to the residue, the solution concentrated to dryness in vacuo, dissolved in 200 ml. absolute alc., and hydrogenated in the presence of 1 g. PtO2 at 50 lb./sq. in., the catalyst filtered off, the filtrate concentrated, and distilled twice in vacuo to give 37.7 g. 3[2-phenyl(methyl)aminoethylamino]-9-methylgranatanine, b0.2-0.9 160-84°, n30D 1.5575.

IT **111499-43-5**, 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1-methyl-4-(3-tropanyl)- **112743-75-6**, 1H-1,4-Benzodiazepine, 1-ethyl-2,3,4,5-tetrahydro-4-(3-tropanyl)- **113223-56-6**, 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1,7-dimethyl-4-(3-tropanyl)-
(and derivs.)

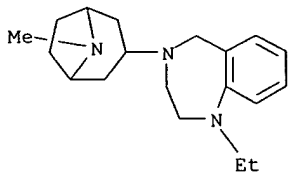
RN 111499-43-5 CAPLUS

CN 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1-methyl-4-(3-tropanyl)- (6CI) (CA INDEX NAME)



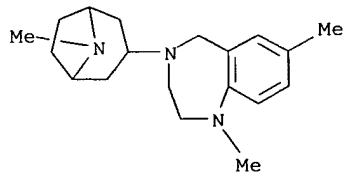
RN 112743-75-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane, 3-(1-ethyl-1,2,3,5-tetrahydro-4H-1,4-benzodiazepin-4-yl)-8-methyl- (9CI) (CA INDEX NAME)



RN 113223-56-6 CAPLUS

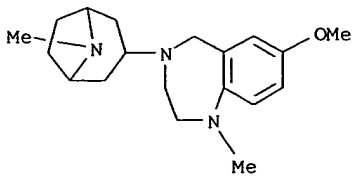
CN 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1,7-dimethyl-4-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)- (9CI) (CA INDEX NAME)



IT **116569-57-4**, 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-7-methoxy-1-methyl-4-(3-tropanyl)-
(preparation of)

RN 116569-57-4 CAPLUS

CN 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-7-methoxy-1-methyl-4-(3-tropanyl)- (6CI) (CA INDEX NAME)



L21 ANSWER 38 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1959:2191 CAPLUS
DN 53:2191
OREF 53:430h-i,431a-i,432a-i
TI Tertiary amino substituted 1,5-iminocycloalkanes
IN Archer, Sydney
PA Sterling Drug Inc.
DT **Patent**
LA Unavailable
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2845427		19580729	US	

AB N-Substituted 1,5-iminocycloalkanes (I) attached at the 3-position through an O, S, or N atom to a tertiary amino alkyl group, which are useful for the reduction of hypertension (the salts and quaternary derivs. are even more active), are prepared by treating a 3-oxo derivative of I with a tertiary amino alkylamine and reducing the resulting imine by condensing the 3-alkali metal sulfide or oxide derivative of I with a tertiary amino alkyl halide and (or) by condensing 3-halo derivative of I with the alkali metal salt of a tertiary amino alkyl mercaptan or hydroxide. 3-Tropolone (30 g.), 24 g. Et2N(CH2)2NH2, 1.2 g. PtO2, and 50 ml. EtOH was shaken 1 hr. under 50 lb. H, filtered, and the filtrate distilled to give 33.2 g. 3-(2-diethylaminoethylamino)-tropane (II), b0.5 111-15°; tri-HCl salt, m. 267-71°; picrate, m. 163.5-6°; dimethiodide, m. 269°; dimethobromide, m. 289-90°. II (59 g.) was cooled to solid CO2 temperature, 54 ml. 100% HCO2H and 24.6 ml. 36% H2CO added, the mixture heated on the steam bath 16 hrs., cooled and made basic, extracted with Et2O, and the product distilled to yield 42.5 g. 3-[(2-diethylaminoethyl)methylamino]tropane, b0.8-1 120-3°, n25D 1.4871; tri-HBr salt, m. above 140°; dimethiodide, m. 242-4°; dimethobromide, m. 245-7°; diethiodide, m. 237-8°. Similarly the following 3-substituted derivs. of tropane were prepared (side chain, b.p./mm., and salts with their m.p. given): Me2N(CH2)2NH, 101.5-3°/0.5 (n25D 1.4880); Me2N(CH2)2NMe, 104-7°/1.2 (n25D 1.4900-9), di-MeI 238-41°; C5H10N(CH2)3NH, 141-50°/0.5; C5H10N(CH2)3NMe, 141-8°/0.2 (n25D 1.5057), di-MeI 222-3°, tri-MeI 207-14°; C5H10N(CH2)2NH, 132-3°/0.5, tri-HCl 275-7°, di-MeI 293°; C5H10N(CH2)2NMe, 118.5-26°/0.07, tri-HBr 220-4.5°, di-MeI 259-66°, di-EtI 215-19°; C4H4N(CH2)3NH, 140-4°/0.05; C4H4N(CH2)3NMe, 129-31°/0.2 (n25D 1.5031-40), di-MeI 226-8°; C4H4N(CH2)2NH, 130-5°/0.5, di-MeI 290-3°; C4H4N(CH2)2NMe, 122-4°/0.3 (n25D 1.5055-60), di-MeI 205-20°; C4H4N(CH2)4NH, 142-8°/0.3 (n25D 1.5038-41); C4H4N(CH2)4NMe, 138-41°/0.2 (n52D 1.5029); OC4H8N(CH2)2NH, 133-5°/0.4 (n25D 1.5066), tri-HCl 245-9.5°, di-MeI 264-5°; OC4H8N(CH2)2NMe, 124-30°/0.1 (n25D 1.5079-83), tri-HBr 252-4°, di-MeI 218-20°; Me2N(CH2)3NH, 112-14°/1.7 (n25D 1.4990), picrate 230°; Me2N(CH2)3NMe, 106-12°/0.5 (n25D 1.4885-8), picrate 231°; Et2N(CH2)3NH, 120-5°/0.1 (n25D 1.4862); Et2N(CH2)3NMe, 120-30/0.1 (n25D 1.4870), di-MeI 222-7°; PhMeN(CH2)2NH (III), 167-73°/0.1; PhEtN(CH2)2NH (IV), 174-7°/0.6, MeI 226-8°; p-MeC6H4NMe(CH2)2NH, 164-73°/0.3 (n23.5D 1.5532); p-MeOC6H4NMe(CH2)2NH, 179-83°/0.5 (n24D 1.5560); NH(CH2)2NH (bis compound), 178-81°/0.6; and NMe(CH2)2NMe (bis compound), 192-200°/1.5, di-MeI 273-4°. II (3.8 g.) and 2.2 g. PhNCS heated in MeOH gave 3.7 g. 1-(2-diethylaminoethyl)-1-(3-tropanyl)-3-phenylthiourea (V), m. 170.5-2°. The following derivs. of II were prepared (group replacing the H of the secondary amine, b.p./mm., or m.p., and certain salts with their m.p. given): MeCH:CHNHCS, 97-100°; EtNHCS, 122-4°; 4-EtOC6H4NHCS, 160-1°; Ac (VI),

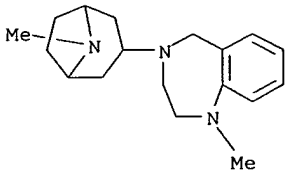
142-4°/0.09 (n25D 1.4980), picrate 198-200°; EtCO (VII), 160°/0.5 (n25D 1.4940-5), picrate 173-6°; and PrCO (VIII), 162-6°/0.7 (n28D 1.4935), picrate 194-6°. VI, VII, and VIII were reduced with LiAlH4 in Et2O to the following N-substituted derivs. of II (substituent, b.p./mm., n28D, and salts given): Et, 142°/2, 1.4845, di-MeI 230-1°, di-EtI 226°; Pr, 119-26°/0.1, 1.4835, picrate 223°, di-MeI 203-9°; and Bu, 125-30°/0.1, 1.4839, picrate 208-10°. Other 3-substituted tropane derivs. that were prepared are (side chain, b.p. m/m., and salts given): C4H4N(CH2)2N(CHO), 166-72°/0.9 (n24D 1.5131); PhEtN(CH2)2N(CHO), 200-7°/0.1-0.2; PhEtN(CH2)2NMe, 182-7°/15 (n24D 1.5518), di MeI 240-2°; p-MeC6H4NMe(CH2)2N(CHO), 95-7°; p - MeC6H4NMe(CH2)2NMe, 174-6°/0.5 (n24D 1.5508-10), HCl 168°, tri-MeI 215°; p-MeOC6H4NMe(CH2)2N(CHO), 112-14°; p-MeOC6H4NMe(CH2)2NMe (IX), 162-6°/0.1 (n25D 1.5518), picrate 205-7°, di-MeI 195-8°. Formic acid (26.5 ml.), 500 ml. H2O, and 29 g. III followed by 10 ml. 37% H2CO was heated 15 hrs. on the steam bath to give 1-methyl-4-(3-tropanyl)-1,2,4,5-tetrahydro-1,4-benzodiazepine (X), b0.6 155-65°; di-MeI salt (XI), m. 264-7°; di-EtI salt, m. 208-10°. X was methylated in the 7-position with H2CO and HCO2H, b0.2 163°; picrate, m. 230-1°; methiodide, m. 274-6°. XI subjected to a Hofmann degradation gave 1-[(2-dimethylaminobenzyl)vinylamino]-3-dimethylamino-5-cycloheptene; dipicrate, m. 193-4°. IV, H2CO, and HCO2H gave the 1-Et homolog of X, b0.5 174-8° (di-MeI salt, m. 269-71°; MeI salt, m. 235-8°; di-MeBr salt, m. 262-2.5°; di-EtBr salt, m. 253-4°), and IX under these conditions gave the 7-methoxy derivative of X, b0.1 180-5°; picrate, m. 239-40°. III heated with 98% HCO2H gave 3-[2-(phenylmethylaminoethyl)formylamino]tropane, b0.5 216-22°, which was reduced with LiAlH4 to the N-Me derivative, b0.6 160-5°; dimethiodide, m. 255°; dimethobromide, m. 258°. Tropine (60 g.) in 50 ml. MePh was added to 9.2 g. Na in 100 ml. MePh, the mixture refluxed 4 hrs. and 42.8 g. Me2N(CH2)2Cl added, the mixture refluxed 3 hrs., aqueous MeOH added, and distilled to give 17.3 g. 3-(2-dimethylaminoethoxy)tropane, b0.9 85-5.5°, n25D 1.4836; diperchlorate, m. 243-6°; dimethiodide, m. 314-15°; diethiodide, m. 269-75°. Similarly, the following 3-substituted tropanes were prepared (side chain, b.p./mm., and salts and their m.p. given): Et2N(CH2)2O, 101°/0.07 (n25D 1.4758), di-MeI 301-2°; C5H10N(CH2)2O, 106-9°/0.07, di-MeI 305°; C5H10N(CH2)3O, 115°/0.1, di-MeI above 305°; C4H4N(CH2)2O, 134°/2.8 (n25D 1.4932), di-MeI 313-14°; Et2N(CH2)3O(CH2)3O, 94-6°/0.2, di-MeI 300°. Pseudotropine, Na, and Et2(CH2)2Cl in C6H6 gave 3-(2-diethylaminoethoxy)pseudotropane, b0.25, 109-12°, n25D 1.4775; dimethiodide, m. 307-8°. Tropanone (69.5 g.), 63.8 g. Et2N(CH2)2NH2, and 500 mg. ZnCl2 in MePh was heated 64 hrs. using an H2O separator to yield 92.2 g. 3-(2-diethylaminoethylimino)tropane (XII), b0.6 117-31°. XII was reduced by Na and EtOH to a mixture of 3-(2-diethylaminoethylamino)tropane and pseudotropane. The mixture of isomers and PhNCS gave V and the isomeric pseudotropane, m. 138-9.5°. By this procedure pseudopelletierine (XIII) and C5H10N(CH2)2NH2 yielded 3-[2-(1-piperidyl)ethylimino]-9-methylgranatanine, b1 164-76°, n25D 1.5235, which was reduced by Na in Me2CH(CH2)3OH to a mixture of isomers of the corresponding amine which was treated with PhNCS in MeOH to yield a mixture of isomers of the thiourea (XIV), m. 174.5-6°, (XV) m. 173-4.5° (AcOEt). XIV (7.3 g.), MeOH, and 25 ml. 4N HCl in EtOH was evaporated, the residue heated 30 min. at 100°, dissolved in EtOH, and the solution cooled to yield 3-[2-(1-piperidyl)ethylamino]-9-methylgranatanine; tri-HCl salt (XVI), m. 285-7°. XV treated in this manner gave an isomer of XVI, m. 276°. Similarly, XIII with the appropriate amine gave the following 3-substituted derivs. of 9-methylgranatanine (side chain, b.p./mm., and salts with their m.p. given; when isomers were obtained, both m.p.'s given): C4H4N(CH2)2NH, 144-6°/1 (n24D 1.5252); C4H4N(CH2)2NH, 155-7°/2 (n25D 1.5102), di-MeI 278°; C4H4N(CH2)2(PhNHCS)N, 173-4°; Et2N(CH2)2NH, 131-9°/0.7 (n25D 1.5050); Et2N(CH2)2NH, 128-30°/0.6 (n25D 1.4920), tri-HCl 278° and 185°, di-MeI 277-9°; Et2N(CH2)2(PhNHCS)N, 189-91° and 135-6°. Concentrated HCl (0.13 ml.) was added to 160 g. 2,5-diethoxytetrahydrofuran in 150 ml. H2O, the suspension stirred 2 hrs. at 48-50° and cooled, 202 g. (EtO2CCH2)2CO, 100 ml. H2O, 107 g. PhCH2NH2, and 83 ml. HCl added, the mixture stirred overnight, 250 ml. HCl added, heated while 270 ml. H2O was distilled, the residue filtered, the filtrate made basic with NaOH, 500 g. K2CO3 added, and the mixture extracted with Et2O to yield 102 g. 8-benzyltropanone (XVII), b0.4 134-7°, n25D 1.5526. XVII yielded 3-(2-diethylaminoethylamino)-8-

benzylnortropane, b0.25 161-8°, n25D 1.5235; tri-HCl salt, m. 264-6°; dimethiodide, m. 255-7°; phenylthiourea derivative, m. 138-9°. The following 8-benzylnortropane derivs. are described (side chain and phenyl substituents, b.p./mm. or m.p., and salts given): 4'-MeO, 3-oxo, 179-84°/0.1 (n25D 1.5538), HCl 203-4°; 4'-MeO, 3-Et2N(CH2)2HN, tri-HCl 277-8°, di-MeI 229-30°; 2',3'-di-MeO, 3-oxo, 178-99°/0.5, HCl 201-2°; 2'-3'-di-MeO, 3-Et2N(CH2)2HN, tri-HCl 234-7°, di-MeI 226-8°; 3,'4'-OCH2O, 3-oxo, tri-HCl 223-3.5°;3',4'-OCH2O,3-Et2N(CH2)2HN, tri-HCl 275-6°, di-MeI 234-7°; 3',4'-OCH2O 3-Et2N(CH2)2(PhNHCS)N, 148-9°; 4'-Cl, 3-oxo, 168-80°/0.8; 4'-Cl, 3-Et2N(CH2)2HN, di-MeI 232-4°, di-MeBr 228-30.5°; 2'-Cl, 3-Et2N(CH2)2(PhNHCS)N, 124-6°; 2'-Cl, 3-C4H4N(CH2)2HN, tri-HCl 253°, di-MeI 218-20°; 2'-MeO, 3-oxo, 174-81°/0.2-0.5 (n25D 1.5061-5), HCl 177-8°; 2'-MeO, 3-Et2N(CH2)2HN, tri-HCl 248-51°, di-MeI 218.5-21.5°; 2',4'-di-Cl, 3-oxo, 185-7°/1.5, tri-HCl 216°; and 2,4-di-Cl, 3-Et2N(CH2)2NH, di-MeI 237-9°. 8-Phenylnortropanone, m. 107-9°, was prepared by the method used for XIII and reaction with Et2N(CH2)2NH2, PtO2, and H gave 3-(2-diethylaminoethylamino)-8-phenylnortropane (XVIII), b0.2 153-68°, which with PhNCS gave the thiourea derivative, m. 161-3°, and with Ac2O yielded N-Ac derivative of XVIII, b0.2 183-98°, n25D 1.5470, which was reduced to the N-Et derivative of XVIII, b0.9 180-4°, n30D 1.5370. PhEtN(CH2)2NH2 (35 g.), 32 g. XIII, 1 g. ZnCl2, and 200 ml. MePh gave 3-(2-phenylmethylaminoethylaminoethylamino)-9-methylgranatanine, b0.2-0.9 160-84°, n30D 1.5575, from which the following N-substituted derivs. were prepared (b.p./mm. and salts with their m.p. given): HCO, 190-220°/0.7; Me, 161-6°/0.15, picrate 191-4°, di-MeI 225-7°; Ac, 200-14°/0.2; and Et, 162-7°/0.1, picrate 203-5°.

IT **111499-43-5**, 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1-methyl-4-(3-tropanyl)- **112743-75-6**, 1H-1,4-Benzodiazepine, 1-ethyl-2,3,4,5-tetrahydro-4-(3-tropanyl)- **113223-56-6**, 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1,7-dimethyl-4-(3-tropanyl)- (and derivs.)

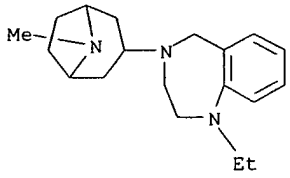
RN 111499-43-5 CAPLUS

CN 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1-methyl-4-(3-tropanyl)- (6CI) (CA INDEX NAME)



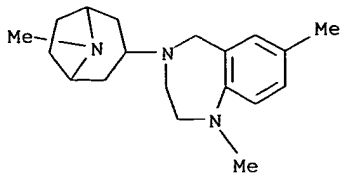
RN 112743-75-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane, 3-(1-ethyl-1,2,3,5-tetrahydro-4H-1,4-benzodiazepin-4-yl)-8-methyl- (9CI) (CA INDEX NAME)

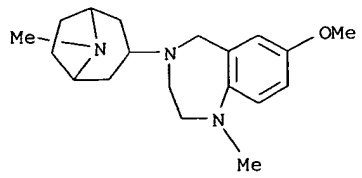


RN 113223-56-6 CAPLUS

CN 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1,7-dimethyl-4-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)- (9CI) (CA INDEX NAME)



IT **116569-57-4**, 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-7-methoxy-1-methyl-4-(3-tropanyl)-
(preparation of)
RN 116569-57-4 CAPLUS
CN 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-7-methoxy-1-methyl-4-(3-tropanyl)- (6CI) (CA INDEX NAME)



L21 ANSWER 39 OF 39 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1957:86038 CAPLUS
DN 51:86038
OREF 51:15607c-i,15608a-i,15609a-h
TI Tertiary amino-substituted compounds of the tropane and granatanine series
PA Sterling Drug Inc.
DT **Patent**
LA Unavailable
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 762256		19561128	GB	

AB Tertiary amino substituted tropanes, granatanines, and their salts are prepared 3-Tropanone (30 g.), 24 g. 2-diethylaminoethylamine, 1.2 g. PtO2, and 50 ml. EtOH is shaken in 50 lb./sq. in. H 2.5 hrs., the product filtered, the filtrate concentrated, and distilled to give 33.2 g. 3-(2-diethylaminoethylamino)tropane, b5 111-15°; picrate, m. 163.5-6° (from aqueous EtOH); trihydrochloride monohydrate, m. 267-71° (from 95% EtOH, MeOH); bismethiodide, m. 269° (from dilute MeOH) (decomposition). To 59 g. 3-[(2-diethylaminoethyl)amino]tropane cooled to -40° is added 54 ml. 100% HCO2H followed by 24.6 ml. 36% HCHO, the mixture heated to 100° 16 hrs., treated with 35% NaOH, extracted with Et2O, and then distilled to yield 42.5 g. 3-[(2-diethylaminoethyl)methylamino]tropane, b-1.0 120-3°, nD25 1.4871. Similarly the following compds. are prepared: 3-[(2-diethylaminoethyl)amino]tropane bismethobromide, m. 289-90° (from MeOH) (decomposition); 3-[(2-diethylaminoethyl) methylamino]tropane trihydrobromide, m. 140° (from MeOH); 3-[(2-dimethylaminoethyl)amino]tropane, b0.5 101.5-3°, nD25 1.4880; 3-[(2-dimethylaminoethyl)methylamino]tropane, b1.2 104-7°, nD25 1.4900-9, m. 238-41° (decomposition); 3-[3-(1-piperidyl)propylamino]tropane, b0.2 141.8-°, nD25 1.5057; 3-{[3-(1-piperidyl)propyl]methylamino}tropane bisethiodide, m. 222-33°; 3-{[3-(1-piperidyl)propyl]methylamino}tropane trismethiodide, m. 207-14°; 3-[2-(1-piperidyl)ethylamino]tropane, b0.5 132-3°; 3-[2-(1-piperidyl)ethylamino]tropane trihydrochloride, m. 275-7°; 3-[2-(1-piperidyl)ethylamino]tropane bis-methiodide, m. 293°; 3-{[2-(1-piperidyl)ethyl]methylamino}tropane, b0.07 118.5-26°; 3-{[2-(1-piperidyl)ethyl]methylamino}tropane trihydrobromide, m. 220-4.5°; 3-{[2-(1-piperidyl)ethyl]methylamino}tropane bismethiodide, m. 259-60°; 3-{[2-(1-piperidyl)ethyl] methylamino}tropane bisethiodide, m. 215-19°; 3-[3-(1-pyrrolidyl)propylamino]tropane, b0.05 140-4°; 3-{[3-(1-pyrrolidyl)propyl]methylamino}tropane, b0.2 129-31°, nD25 1.5031-40; 3-{[3-(1-pyrrolidyl)propyl]methylamino}tro

pane bismethiodide, m. 226-8°; 3-[2-(1-pyrrolidyl)ethylamino]tropane, b0.5 130-5°; 3-[2-(1-pyrrolidyl)ethylamino]tropane bismethiodide, m. 290-3° (decomposition); 3-{[2-(1-pyrrolidyl)ethyl]methylamino}tropane, b0.3 122-4°, nD25 1.5055-60; 3-{[2-(1-pyrrolidyl)ethyl]methylamino}tropane bismethiodide, m. 205-20°; 3-[4-(1-pyrrolidyl)butylamino]tropane, b0.3 142-8°, nD25 1.5038-41; 3-{[4-(1-pyrrolidyl)butyl]methylamino}tropane, b0.2 138-40°, nD25.5 1.5029; 3-[2-(4-morpholinylethylamino]tropane, b0.4 133-5°, nD25 1.5066; 3-[2-(4-morpholinylethylamino]tropane trihydrochloride, m. 245-9° (with decomposition); 3-[2-(4-morpholinyl)ethylamino]tropane bismethiodide, m. 264.5-5° (decomposition); 3-{[2-(4-morpholinyl)ethyl]methylamino}tropane, b0.1 124-30°, nD25 1.5079-83; 3-{[2-(4-morpholinyl)ethyl]methylamino}tropane trihydrobromide, m. 252-4° (decomposition); 3-{[2-(4-morpholinyl)ethyl]methylamino}tropane bismethiodide, m. 218-20°; 3-(3-dimethylaminopropylamino) tropane, b1.7 112-14°, nD24 1.4990 (tripicrate, m. 230°); 3-[(3-dimethylaminopropyl)methylamino]tropane, b0.5 106-12°, nD26 1.4885-8 [picrate, m. 231° (decomposition)]; 3-(3-diethylaminopropylamino)tropane, b0.1 120-5°, nD25 1.4862 [picrate,m. 212° (decomposition)]; 3-[(3-diethylaminopropyl)methylamino]tropane, b0.1 120-3°, nD25 1.4870; 3-[(3-diethylaminopropyl)methylamino]tropane bismethiodide, m. 222-7°. Tropine (60 g.), 150 ml. PhMe, and 9.2 g. Na is refluxed 4 hrs., then 3 more hrs. with 42.8 g. 2-dimethylaminoethyl chloride in 50 ml. PhMe, aqueous MeOH added to the cooled product, and the organic layer separated, concentrated, and distilled to yield 17.3 g. 3-(2-diethylaminoethoxy)tropane, b0.9 85-0.5°, nD25 1.4836; bisperchlorate, m. 243-6° (from aqueous AcOH); bismethiodide, m. 314-5° (from MeOH) (decomposition). Similarly, the following compds. are prepared: 3-(2-diethylaminoethoxy)tropane, b0.07 101°, nD25 1.4758; 3-(2-diethylaminoethoxy)tropane bismethiodide, m. 301-2° (decomposition); 3-[2-(1-piperidyl)ethoxy]tropane, b0.07 106-9°; 3-[2-[1-piperidyl)ethoxy]tropane bismethiodide, m. above 305°; 3-[3-(1-piperidyl)propoxy]tropane, b0.1 115°; 3-[3-(1-piperidyl)propoxy]tropane bismethiodide, m. above 305°; 3-[2-(1-pyrrolidyl)ethoxy]tropane, b2.8 134°, nD25 1.4932; 3-[2-(1-pyrrolidyl)ethoxy]tropane bismethiodide, m. 313-4°; 3-(2-diethylaminoethoxy)pseudotropane, b0.25 109-12°, nD25 1.4775; 3-(2-diethylaminoethoxy)pseudotropane bismethiodide, m. 307-8° (decomposition); 3-(3-diethylaminopropoxy)tropane, b0.2 94-6°; 3-(3-diethylaminopropoxy)tropane bismethiodide, m. 300° (decomposition). 3-(2-Diethylaminoethylmercapto)tropane can be prepared by heating 3-bromotropane with 3-diethylaminoethylmercaptan in NaOH solution 1-Methyl-4-(3-tropanyl)-1,2,4,5-tetrahydro-1,4-benzodiazepine bismethiodide, m. 264-7° (from H2O) (decomposition). Similarly the following compds. are prepared: 3-(2-phenylmethylaminoethylamino)tropane, b0.1 167-73°; 1-methyl-4-(3-tropanyl)-1,2,4,5-tetrahydro-1,4-benzodiazepine, b0.3 170-2°; 3-(2-phenylethylaminoethylamino)tropane, b0.6 174-7°; 3-(2-phenylethylaminoethylamino)tropane 8-methiodide, m. 226-8° (decomposition); 1-ethyl-4-(3-tropanyl)-1,2,4,5-tetrahydro-1,4-benzodiazepine, b0.5 174-8°; 1-ethyl-4-(3-tropanyl)-1,2,4,5-tetrahydro-1,4-benzodiazepine bismethiodide, m. 269-71°; 1-ethyl-4-(3-tropanyl)-1,2,4,5-tetrahydro-1,4-benzodiazepine 8-methiodide, m. 235-8°; 1-ethyl-4-(3-tropanyl)-1,2,4,5-tetrahydro-1,4-benzodiazepine bismethobromide, m. 262-2.5° (decomposition). 2,5-Diethoxytetrahydrofuran (160 g.), 150 ml. H2O, and 0.13 ml. concentrated HCl stirred at 48-50° 2 hrs., cooled to 25°, 202 g. di-Et acetonedicarboxylate followed by 100 ml. H2O and 107 g. PhCH2NH2.HCl added, the mixture stirred overnight, treated with 250 ml. HCl, and heated to 103° to remove H2O, the residue filtered off, the filtrate made basic with 250 ml. 35% NaOH, 500 g. K2CO3 added, and extracted 3 times with Et2O gave 102 g. 8-benzylnortropanone, b0.4 134-7, nD25 1.5562. Similarly are prepared: 3-(2-diethylaminoethylamino)-8-benzylnortropane, b0.25 161-8°, nD25 1.5235; 3-(2-diethylaminoethylamino)-8-benzylnortropane trihydrochloride, m. 264-6° (decomposition); 3-(2-diethylaminoethylamino)-8-benzylnortropane bismethiodide, m. 255-7°; 3-(2-diethylaminoethylamino)-8-(4-methoxybenzyl) nortropane; 3-(2-diethylaminoethylamino)-8-(4-methoxybenzyl)nortropane trihydrochloride, m. 277-8° (decomposition); 3-(2-diethylaminoethylamino)-8-(4-methoxybenzyl)nortropane bismethiodide, m. 229-30°; 3-(2-diethylaminoethylamino)-8-(2,3-dimethoxybenzyl)nortropane; 3-(2-diethylaminoethylamino)-8-(2,3-dimethoxybenzyl)nortropane trihydrochloride, m. 234-7°; 3-(2-diethylaminoethylamino)-8-(2,3-dimethoxybenzyl)nortropane bismethiodide, m. 226-8°; 3-(2-diethylaminoethylamino)-8-(3,4-methylenedioxybenzyl) nortropane; 3-(2-diethylaminoethylamino)-8-(3,4-

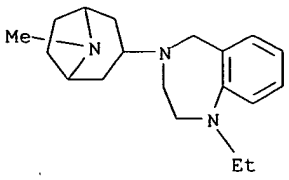
methylenedioxybenzyl)nortropane trihydrochloride, m. 275-6° (decomposition); 3-(2-diethylaminoethylamino)-8-(3,4-methylenedioxybenzyl)tropane bismethiodide, m. 234-7°; 3-(2-diethylaminoethylamino)-8-(4-chlorobenzyl)nortropane; 3-(2-diethylaminoethylamino)-8-(4-chlorobenzyl)nortropane trihydrochloride, m. 273-5°; 3-(2-diethylaminoethylamino)-8-(2-chlorobenzyl)nortropane; 3-(2-diethylaminoethylamino)-8-(2-chlorobenzyl)nortropane bismethiodide, m. 232-4°; 3-(2-diethylaminoethylamino)-8-(2-methoxybenzyl)nortropane trihydrochloride, m. 248-51°; 3-(2-diethylaminoethylamino)-8-(2-methoxybenzyl)nortropane bismethiodide, m. 218.5-21.5°; 3-(2-diethylaminoethylamino)-8-phenylnortropane; 3-(2-diethylaminoethyl)methylamino-8-phenylnortropane. Hydrated pseudopelletierine (29.8 g.), 26 g. 2-(1-piperidyl)ethylamine, 600 mg. ZnCl2, and 150 ml. C6H5CH3 refluxed 64 hrs. using a separator to collect the H2O formed, the product cooled, washed with 50 ml. saturated K2CO3 solution, and the aqueous layer extracted with 4 50-ml. portions of C6H6 yielded 27.8 g. 3-2-(1-piperidyl)ethylimino-9-methylgranatanine (II), b1 164-76°, nD25 1.5235. To 27.8 g. II in 40 g. 4-methyl-2-pentanol is added slowly 9.2 g. Na in 200 ml. PhMe, the mixture refluxed 0.5 hr., 30 ml. H2O added, cooled, the aqueous layer saturated with K2CO3, extracted with 3 100-ml. portions of PhMe, the PhMe layers concentrated, dissolved in 50 ml. MeOH, 15 g. phenyl isothiocyanate stirred in, and the precipitate (34.4 g.) filtered off and recrystd. from AcOEt. By fractional precipitation from MeOH 2 isomers of 1-2 (1-piperidyl)ethyl-1-3-(9-methyl)granatanyl-3-phenylthiourea, isomer A, m. 174.5-6° (prisms from AcOEt), and isomer B, 173-4.5° (needles) are obtained. Also prepared were: 3-[2-(1-piperidyl)ethylamino]-9-methylgranatanine trihydrochloride (from isomer A), m. 285-7° (decomposition); 3-[2-(1-piperidyl) ethylamino]-9-methylgranatanine trihydrochloride (from isomer B), m. 276° (decomposition); 1-(2-diethylaminoethyl)-1-(3-tropanyl)-3-phenylthiourea, m. 170.5-2°; 3-(2-diethylaminoethylimino)tropane, b0.6 117-31°; 3-(2-diethylaminoethylamino)tropane; 1-(2-diethylaminoethyl)-1-(3-pseudotropanyl)-3-phenylthiourea, m. 138-9.5°; 3-(2-diethylaminoethylamino)pseudotropane trihydrochloride, m. 276° (decomposition); 3-(2-diethylaminoethylamino)pseudotropane bismethiodide, m. 279-81° (MeOH); 3-[2-(1-pyrrolidyl)ethylamino]-9-methylgranatanine, b2 155-7°, nD25 1.5102; 1-[2-(1-pyrrolidyl) ethyl]-1-[3-(9-methyl) granatanyl]-3-phenylthiourea, m. 173-4°; 3-[2-(1-pyrrolidyl)ethylamino]-9-methylgranatanine bismethiodide, m. 278° (decomposition); 3-(2-diethylaminoethylamino)-9-methylgranatanine, b0.6 128-30°, nD25 1.4920; 1-(2-diethylaminoethyl)-1-(9-methylgranatanyl)-3-phenylthiourea, isomer B, m. 188-90°; 1-(2-diethylaminoethyl)-1-(9-methylgranatanyl)-3-phenylthiourea, isomer A, m. 135-6°; 3-(2-diethylaminoethylamino)-9-methylgranatanine trihydrochloride, isomer A, m. 278° (decomposition) [trihydrochloride of isomer B, m. 185°; bismethiodide of isomer A, m. 277-9° (decomposition)]; 1-(2-diethylaminoethyl)-1-{3-[8-(2-chlorobenzyl)nortropanyl]}-3-phenylthiourea, m. 124-6°; 1-(2-diethylaminoethyl)-1-[3-(8-phenyl)nortropanyl]-3-phenylthiourea, m. 161-3°. 3-(2-Diethylaminoethylamino)tropane (4.0 g.) treated with 1.7 ml. allyl isothiocyanate yielded 3.6 g. 1-(2-diethylaminoethyl)-1-(3-tropanyl)-3-allylthiourea, m. 97-100°. Similarly the following compds. are prepared: 1-(2-diethylaminoethyl)-1-(3-tropanyl)-3-ethylthiourea, m. 122-4°; 1-(2-diethylaminoethyl)-1-(3-tropanyl)-3-(4-ethoxyphenyl)thiourea, m. 160-1°; 1-(2-diethylaminoethyl)-1-[3-(8-benzyl)nortropanyl]-3-phenylthiourea, m. 138-9°; 1-(2-diethylaminoethyl)-1-{3[8-(3,4-methylenedioxybenzyl)]nortropanyl}-3-phenylthiourea, m. 148-9°; 3-[(2-diethylaminoethyl)acetylamino]tropane, b0.09 142-4°, nD25 1.4980 (picrate, m. 190-200°) (from EtOH); 3-[(2-diethylaminoethyl)ethylamino]tropane, b2 142°, nD25 1.4845 (bismethiodide, m. 230-1°) (decomposition); 3-[(2-diethylaminoethyl)ethylamino]tropane bismethiodide, m. 226° (decomposition); 3-[(2-diethylaminoethyl)propionylamino]tropane, b0.5 160°, nD28 1.4940-5 (picrate, m. 173-6°) (from aqueous HCONMe2); 3-[(2-diethylaminoethyl)propylamino]tropane, b0.1 119-26°, nD28 1.4835 [picrate, m. 223° (decomposition); bismethiodide, m. 203-9° (decomposition)]; 3-[(2-diethylaminoethyl)butyrylamino]tropane, b0.7 162-6°, nD25 1.4935 (picrate, m. 194-6°); 3-[(2-diethylaminoethyl)butylamino]tropane, b0.1 125-30°, nD25 1.4839 [picrate, m. 208-10° (decomposition)]; 3-[(2-diethylaminoethyl)acetylamino]-8-phenylnortropane, b0.2 183-98°, nD28 1.5470; 3-[(2-diethylaminoethyl)ethylamino]-8-phenylnortropane, b0.9 180-4°, nD30 1.5370; 3-[(2-phenylethylaminoethyl)formylamino]tropane, b0.1-0.2 200-7°; 3-{[2-(1-pyrrolidyl)ethyl]formylamino}tropane,

b0.9 166-72°, nD25 1.5131 (picrate, m. 192-4°);
3-[2-phenylethylaminoethyl)methylamino]tropane, b1.6 182-7°, nD24 1.5518.

IT **112743-75-6**, 1H-1,4-Benzodiazepine, 1-ethyl-2,3,4,5-tetrahydro-4-(3-tropanyl)-
(and derivs.)

RN 112743-75-6 CAPLUS

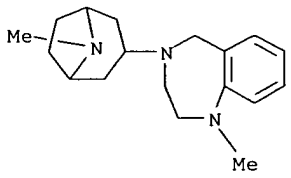
CN 8-Azabicyclo[3.2.1]octane, 3-(1-ethyl-1,2,3,5-tetrahydro-4H-1,4-benzodiazepin-4-yl)-8-methyl- (9CI) (CA INDEX NAME)



IT **111499-43-5**, 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1-methyl-4-(3-tropanyl)- **112325-75-4**, 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1-methyl-4-(3-tropanyl)-, dimethiodide
(preparation of)

RN 111499-43-5 CAPLUS

CN 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1-methyl-4-(3-tropanyl)- (6CI) (CA INDEX NAME)

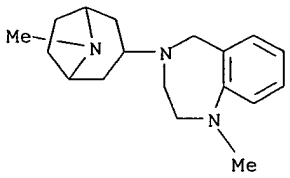


RN 112325-75-4 CAPLUS

CN 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1-methyl-4-(3-tropanyl)-, dimethiodide (6CI) (CA INDEX NAME)

CM 1

CRN 111499-43-5
CMF C18 H27 N3



CM 2

CRN 74-88-4
CMF C H3 I

H_3C-I

10726680

```
=> d his

     (FILE 'HOME' ENTERED AT 16:46:58 ON 15 FEB 2005)

     FILE 'REGISTRY' ENTERED AT 16:47:09 ON 15 FEB 2005
L1                STRUCTURE UPLOADED
L2              2 S L1
L3                STRUCTURE UPLOADED
L4              1 S L3
L5                STRUCTURE UPLOADED
L6              0 S L5

     FILE 'CAPLUS' ENTERED AT 17:03:42 ON 15 FEB 2005
                  E WO 9854181/PN
L7              1 S E3
                  SELECT L7 1 RN

     FILE 'REGISTRY' ENTERED AT 17:04:45 ON 15 FEB 2005
L8             55 S E1-E55
L9              1 S L8 AND C13 H18 N2 . 2 CL H/MF

     FILE 'REGISTRY' ENTERED AT 17:07:30 ON 15 FEB 2005
L10             1 S 216853-19-9/RN
                  SET NOTICE 1 DISPLAY
                  SET NOTICE LOGIN DISPLAY

     FILE 'REGISTRY' ENTERED AT 17:09:46 ON 15 FEB 2005
L11         28079 S 197.56/RID
L12            21 S L3  SUB=L11 SAMPPLE
L13           423 S L3 SSS FULL SUB=L11

     FILE 'CAPLUS' ENTERED AT 17:11:51 ON 15 FEB 2005
L14            93 S L13
L15            69 S L14 AND PATENT/DT

     FILE 'REGISTRY' ENTERED AT 17:24:31 ON 15 FEB 2005
L16             0 S L13 AND 3/NR
L17             0 S L13 AND 2/NR
L18           193 S L13 AND 4/NR

     FILE 'CAPLUS' ENTERED AT 17:38:51 ON 15 FEB 2005
L19            53 S L18
L20            40 S L19 AND PATENT/DT
L21            39 S L20 NOT L7

=> s l19 not l21
L22           14 L19 NOT L21

=> s l22 and pain
          36573 PAIN
L23            0 L22 AND PAIN

=>

=>
Executing the logoff script...


=> LOG H

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   200.04     411.33

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                   -28.47     -29.83

 SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 17:43:35 ON 15 FEB 2005

Connecting via Winsock to STN
```

10726680

Welcome to STN International! Enter x:x

LOGINID:sssptal203exh

PASSWORD:
* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 17:49:18 ON 15 FEB 2005
FILE 'CAPLUS' ENTERED AT 17:49:18 ON 15 FEB 2005
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	200.04	411.33

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-28.47	-29.83

=> d his

(FILE 'HOME' ENTERED AT 16:46:58 ON 15 FEB 2005)

FILE 'REGISTRY' ENTERED AT 16:47:09 ON 15 FEB 2005
L1 STRUCTURE UPLOADED
L2 2 S L1
L3 STRUCTURE UPLOADED
L4 1 S L3
L5 STRUCTURE UPLOADED
L6 0 S L5

FILE 'CAPLUS' ENTERED AT 17:03:42 ON 15 FEB 2005
E WO 9854181/PN
L7 1 S E3
SELECT L7 1 RN

FILE 'REGISTRY' ENTERED AT 17:04:45 ON 15 FEB 2005
L8 55 S E1-E55
L9 1 S L8 AND C13 H18 N2 . 2 CL H/MF

FILE 'REGISTRY' ENTERED AT 17:07:30 ON 15 FEB 2005
L10 1 S 216853-19-9/RN
SET NOTICE 1 DISPLAY
SET NOTICE LOGIN DISPLAY

FILE 'REGISTRY' ENTERED AT 17:09:46 ON 15 FEB 2005
L11 28079 S 197.56/RID
L12 21 S L3 SUB=L11 SAMPPLE
L13 423 S L3 SSS FULL SUB=L11

FILE 'CAPLUS' ENTERED AT 17:11:51 ON 15 FEB 2005
L14 93 S L13
L15 69 S L14 AND PATENT/DT

FILE 'REGISTRY' ENTERED AT 17:24:31 ON 15 FEB 2005
L16 0 S L13 AND 3/NR
L17 0 S L13 AND 2/NR
L18 193 S L13 AND 4/NR

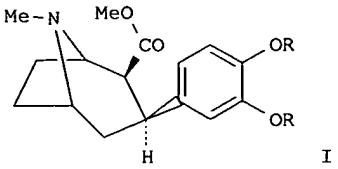
FILE 'CAPLUS' ENTERED AT 17:38:51 ON 15 FEB 2005
L19 53 S L18
L20 40 S L19 AND PATENT/DT
L21 39 S L20 NOT L7
L22 14 S L19 NOT L21
L23 0 S L22 AND PAIN

=> d l22 1, 5, 10-14 bib abs hitstr

L22 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:841856 CAPLUS
DN 140:77283
TI Synthesis and biological activity of 2-Carbomethoxy-3-catechol-8-azabicyclo[3.2.1]octanes
AU Meltzer, Peter C.; McPhee, Mark; Madras, Bertha K.
CS Organix Inc., Woburn, MA, 01801, USA
SO Bioorganic & Medicinal Chemistry Letters (2003), 13(22), 4133-4137
CODEN: BMCLE8; ISSN: 0960-894X

10726680

PB Elsevier Science B.V.
DT Journal
LA English
OS CASREACT 140:77283
GI



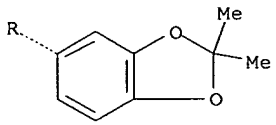
I

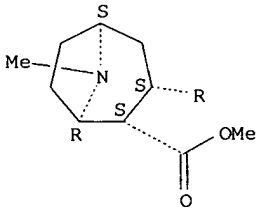
AB Cocaine inhibits the dopamine transporter and the consequent elevation of dopamine is thought to contribute to the addictive properties of cocaine. Tropane analogs of cocaine, targeted to the dopamine transporter (DAT), are a significant focus of drug design for cocaine addiction medications. Herein, we report the function of the ortho hydroxy substituents in dopamine with respect to the azabicyclo[3.2.1]octane skeleton. The introduction of the o-dihydroxyl functionality led to reduced binding potency at monoamine transporters, rather than enhanced interaction with the DAT. It is therefore likely that the binding site for these compds. on the DAT is not the same as that for dopamine. Notwithstanding the moderate potency of the free catechols (>100 nM), tropane ester I (R = H) manifested stimulant activity with a duration of effect that exceeded 4 h in a rat locomotor activity assay. I (R = COMe), a diacetoxy prodrug for I (R = H), substituted fully for cocaine in a rat drug-discrimination paradigm and is now undergoing further investigation as a potential medication for cocaine abuse.

IT **211046-86-5P 639858-21-2P 639858-22-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and monoamine transporter binding activity of 2-carbomethoxy-3-catechol-8-azabicyclo[3.2.1]octanes)

RN 211046-86-5 CAPLUS
CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(2,2-dimethyl-1,3-benzodioxol-5-yl)-8-methyl-, methyl ester, (1R,2S,3S,5S)- (9CI) (CA INDEX NAME)

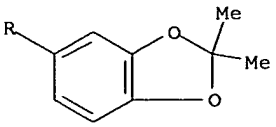
Absolute stereochemistry.

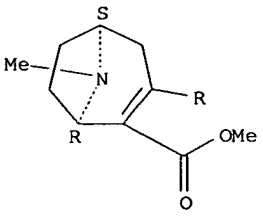




RN 639858-21-2 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 3-(2,2-dimethyl-1,3-benzodioxol-5-yl)-8-methyl-, methyl ester, (1R,5S)- (9CI) (CA INDEX NAME)

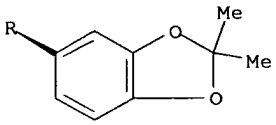
Absolute stereochemistry.

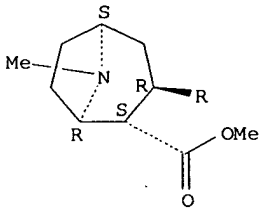




RN 639858-22-3 CAPLUS
CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(2,2-dimethyl-1,3-benzodioxol-5-yl)-8-methyl-, methyl ester, (1R,2S,3R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.





RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

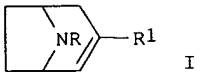
L22 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:795013 CAPLUS
DN 130:52335
TI 8-Azabicyclo[3.2.1]oct-2-ene and -octane derivatives as cholinergic ligands at nicotinic ACh receptors
IN Peters, Dan; Olsen, Gunnar M.; Nielsen, Simon Feldbaek; Nielsen, Elsebet Ostergaard
PA Neurosearch A/s, Den.
SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9854181	A1	19981203	WO 1998-DK225	19980529
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2289574	AA	19981203	CA 1998-2289574	19980529
	ZA 9804639	A	19981211	ZA 1998-4639	19980529

	AU 9874261	A1	19981230	AU 1998-74261	19980529
	AU 745964	B2	20020411		
	EP 984965	A1	20000315	EP 1998-921378	19980529
	EP 984965	B1	20040519		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	TR 9902942	T2	20000421	TR 1999-9902942	19980529
	EE 9900529	A	20000615	EE 1999-529	19980529
	EE 4057	B1	20030616		
	BR 9809697	A	20000711	BR 1998-9697	19980529
	NZ 500642	A	20011130	NZ 1998-500642	19980529
	JP 2002501514	T2	20020115	JP 1999-500130	19980529
	RU 2186780	C2	20020810	RU 1999-128075	19980529
	AT 267199	E	20040615	AT 1998-921378	19980529
	NO 9905850	A	19991129	NO 1999-5850	19991129
	US 6645977	B1	20031111	US 1999-450637	19991129
	MX 9911081	A	20000831	MX 1999-11081	19991130
	US 2004019207	A1	20040129	US 2003-620559	20030717
PRAI	DK 1997-627	A	19970530		
	DK 1997-1502	A	19971219		
	DK 1998-408	A	19980324		
	DK 1998-534	A	19980416		
	WO 1998-DK225	W	19980529		
	US 1999-450637	A3	19991129		

OS MARPAT 130:52335

GI



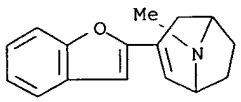
I

AB Title compds. I (R = H, alkyl, alkenyl, aryl, aralkyl, etc.; R1 = acyl, aryl, heteroaryl, etc.) or their saturated analogs were prepared by several methods. Thus, endo-8-benzyl-3-hydroxy-3-(3-pyridyl)-8-azabicyclo[3.2.1]octane (II) was prepared in 34% yield from 8-benzyl-8-azabicyclo[3.2.1]octan-3-one and 3-bromopyridine, and II was then converted to I (R = benzyl, R1 = 3-pyridyl) in 78% yield. The latter was converted to the fumarate salt. The affinity of the products for nicotinic ACh receptors was examined in tests of 3H-cytisine, 3H-epibatidin, and 3H-α-bungarotoxin binding.

IT **216853-31-5P 216853-54-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(8-azabicyclo[3.2.1]oct-2-ene and -octane derivs. as cholinergic ligands at nicotinic ACh receptors)

RN 216853-31-5 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(2-benzofuranyl)-8-methyl- (9CI) (CA INDEX NAME)

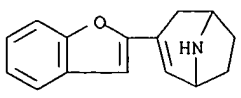


RN 216853-54-2 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(2-benzofuranyl)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

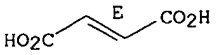
CRN 216853-53-1
CMF C15 H15 N O



CM 2

CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.

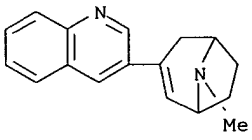


IT **216853-09-7P 216853-11-1P 216853-32-6P**
216853-33-7P 216853-40-6P 216853-58-6P
216853-62-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(8-azabicyclo[3.2.1]oct-2-ene and -octane derivs. as cholinergic ligands at nicotinic ACh receptors)

RN 216853-09-7 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 8-methyl-3-(3-quinolinyl)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

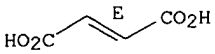
CRN 216853-08-6
CMF C17 H18 N2



CM 2

CRN 110-17-8
CMF C4 H4 O4

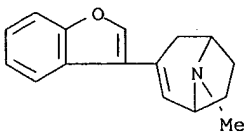
Double bond geometry as shown.



RN 216853-11-1 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(3-benzofuranyl)-8-methyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

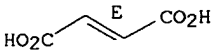
CRN 216853-10-0
CMF C16 H17 N O



CM 2

CRN 110-17-8
CMF C4 H4 O4

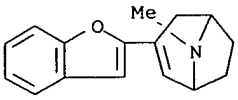
Double bond geometry as shown.



RN 216853-32-6 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(2-benzofuranyl)-8-methyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

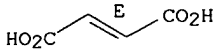
CRN 216853-31-5
CMF C16 H17 N O



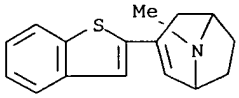
CM 2

CRN 110-17-8
CMF C4 H4 O4

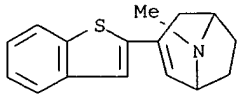
Double bond geometry as shown.



RN 216853-33-7 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-benzo[b]thien-2-yl-8-methyl- (9CI) (CA INDEX NAME)



RN 216853-40-6 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-benzo[b]thien-2-yl-8-methyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

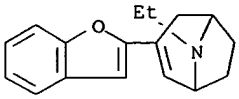
RN 216853-58-6 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(2-benzofuranyl)-8-ethyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 216853-57-5

10726680

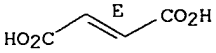
CMF C17 H19 N O



CM 2

CRN 110-17-8
CMF C4 H4 O4

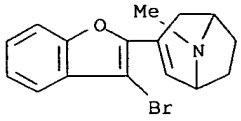
Double bond geometry as shown.



RN 216853-62-2 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(3-bromo-2-benzofuranyl)-8-methyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

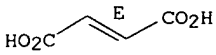
CRN 216853-61-1
CMF C16 H16 Br N O



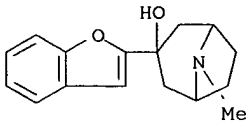
CM 2

CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.



IT **216853-39-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(8-azabicyclo[3.2.1]oct-2-ene and -octane derivs. as cholinergic ligands at nicotinic ACh receptors)
RN 216853-39-3 CAPLUS
CN 8-Azabicyclo[3.2.1]octan-3-ol, 3-(2-benzofuranyl)-8-methyl- (9CI) (CA INDEX NAME)

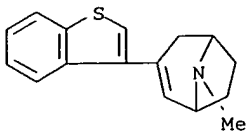


IT **216853-13-3P 216853-45-1P 216853-46-2P**
216853-64-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(8-azabicyclo[3.2.1]oct-2-ene and -octane derivs. as cholinergic

ligands at nicotinic ACh receptors)
RN 216853-13-3 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-benzo[b]thien-3-yl-8-methyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

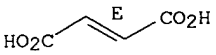
CRN 216853-12-2
CMF C16 H17 N S



CM 2

CRN 110-17-8
CMF C4 H4 O4

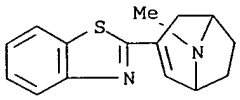
Double bond geometry as shown.



RN 216853-45-1 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(2-benzothiazolyl)-8-methyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

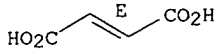
CRN 216853-44-0
CMF C15 H16 N2 S



CM 2

CRN 110-17-8
CMF C4 H4 O4

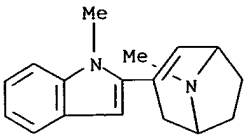
Double bond geometry as shown.



RN 216853-46-2 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 8-methyl-3-(1-methyl-1H-indol-2-yl)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

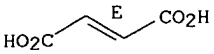
CRN 155509-79-8
CMF C17 H20 N2



CM 2

CRN 110-17-8
CMF C4 H4 O4

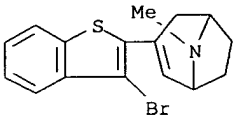
Double bond geometry as shown.



RN 216853-64-4 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(3-bromobenzo[b]thien-2-yl)-8-methyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

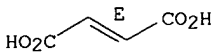
CRN 216853-63-3
CMF C16 H16 Br N S



CM 2

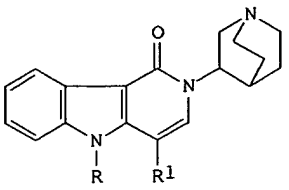
CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.

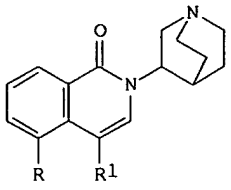


RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

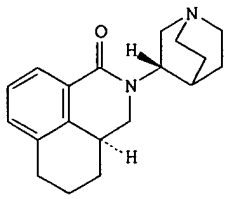
L22 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1993:539153 CAPLUS
DN 119:139153
TI 2-(Quinuclidin-3-yl)pyrido[4,3-b]indol-1-ones and isoquinolin-1-ones. Potent conformationally restricted 5-HT3 receptor antagonists
AU Clark, Robin D.; Miller, Aaron B.; Berger, Jacob; Repke, David B.; Weinhardt, Klaus K.; Kowalczyk, Bruce A.; Eglen, Richard M.; Bonhaus, Douglas W.; Lee, Chi Ho; et al.
CS Inst. Org. Chem., Syntex Res., Palo Alto, CA, 94304, USA
SO Journal of Medicinal Chemistry (1993), 36(18), 2645-57
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
GI



I



II

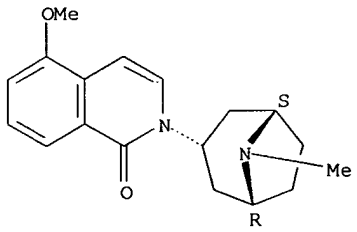


III

AB Several series of N-(quinuclidin-3-yl)aryl and heteroaryl-fused pyridones were synthesized and evaluated for 5-HT3 receptor affinity. In the heteroaryl series, pyrido[4,3-b]indol-1-one I (R = Me, R1 = H) and the 4,5-alkano-bridged analogs I [RR1 = (CH2)n (n = 3, 4)] displayed high 5-HT3 receptor affinity with pKi values >9. The (3S)-quinuclidinyl isomers had >10 fold higher affinity than the (3R)-isomers. In a series of 2-(quinuclidin-3-yl)isoquinolin-1-ones, derivs. substituted with small lipophilic groups (II; R = Me, Et, OMe, Cl, R1 = H) and with 4,5-alkano-bridges [II; RR1 = (CH2)n (n = 2, 3, 4)] also displayed high affinity. In particular, the hexahydro-1H-benz[de]isoquinolinone (S,S)-37 (III) was the highest affinity 5-HT3 receptor ligand prepared (pKi 10.4). A number of the high affinity ligands were shown to be potent 5-HT3 receptor antagonists in vivo as determined by inhibition of the B-J reflex in the anesthetized rat. Again, (S,S)-37 was the most active agent tested (ID50 0.02 μg/kg i.v.), and this compound was also potent in blocking cisplatin-induced emesis in both the ferret and the dog. Computer modeling studies were performed, and previously reported 5-HT3 receptor antagonist pharmacophore models were refined to include a key lipophilic binding domain.

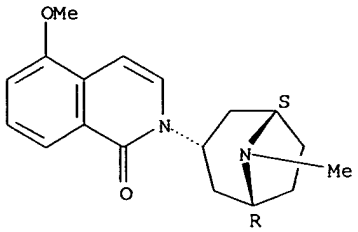
IT **149653-91-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(5-HT3 receptor antagonist activity of)
RN 149653-91-8 CAPLUS
CN 1(2H)-Isoquinolinone, 5-methoxy-2-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT **149630-95-5P 149630-96-6P 149653-92-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and 5-HT3 receptor antagonist activity of)
RN 149630-95-5 CAPLUS
CN 1(2H)-Isoquinolinone, 5-methoxy-2-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-, monohydrochloride, endo- (9CI) (CA INDEX NAME)

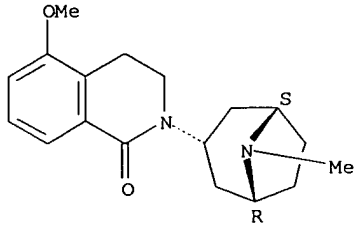
Relative stereochemistry.



● HCl

RN 149630-96-6 CAPLUS
CN 1(2H)-Isoquinolinone, 3,4-dihydro-5-methoxy-2-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-, monohydrochloride, endo- (9CI) (CA INDEX NAME)

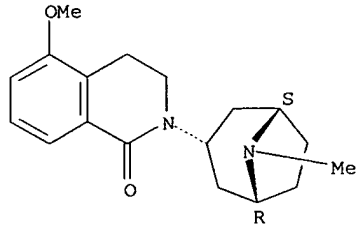
Relative stereochemistry.



● HCl

RN 149653-92-9 CAPLUS
CN 1(2H)-Isoquinolinone, 3,4-dihydro-5-methoxy-2-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



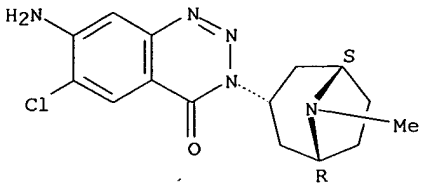
L22 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1993:530913 CAPLUS
DN 119:130913
TI Derivatives of naphthalimide: new potent conformationally restricted antagonists of 5-HT3 receptors
AU Langlois, M.; Soulier, J. L.; Bremont, B.; Shen, S.; Rampillon, V.; Giudice, A.
CS CERCOA, CNRS, Thiais, 94320, Fr.
SO Bioorganic & Medicinal Chemistry Letters (1992), 2(7), 691-4
CODEN: BMCLE8; ISSN: 0960-894X
DT Journal
LA English
AB New potent 5-HT3 antagonists were synthesized from naphthalic anhydride and racemic or (R) and (S) 3-aminoquinuclidines. In contrast to zacopride, the activity resided essentially in the (R) enantiomer.

Conformational studies demonstrated the presence of a locked structure. The reduction of one carbonyl function yielded equipotent compds. with a loss of enantioselectivity.

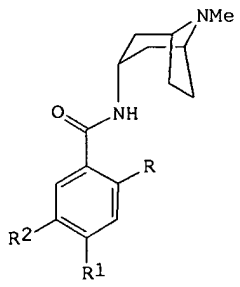
IT **123948-34-5**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(serotoninergic S3 antagonist activity of, structure in relation to)

RN 123948-34-5 CAPLUS
CN 1,2,3-Benzotriazin-4(3H)-one, 7-amino-6-chloro-3-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-, endo- (9CI) (CA INDEX NAME)

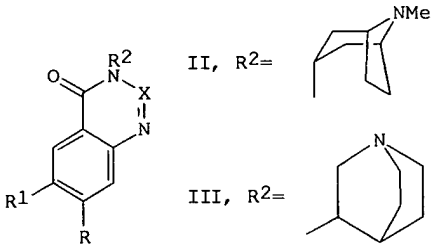
Relative stereochemistry.



L22 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1991:35792 CAPLUS
DN 114:35792
TI Benzotriazinones as virtual-ring mimics of o-methoxybenzamides: novel and potent 5-HT3 receptor antagonists
AU King, Frank D.; Dabbs, Steven; Bermudez, Jose; Sanger, Gareth J.
CS SmithKline Beecham Pharm., Harlow/Essex, UK
SO Journal of Medicinal Chemistry (1990), 33(11), 2942-4
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
OS CASREACT 114:35792
GI



I

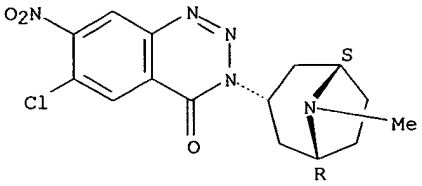


AB o-Methoxybenzamides are known which show potential 5-HT3 receptor antagonistic activity. The importance of H bonding between the o-methoxy group and the amide of these compds. for their 5-HT3 receptor antagonistic activities was examined by analyzing the 5-HT3 receptor antagonistic activities of compds. in which this "virtual ring" was replace by actual closed rings. The 5-HT3 receptor antagonist activity assessed was

antagonism of 5-HT-induced bradycardia in the anesthetized rat (von Bezold-Jarisch reflex). Comparison of a series of synthetic "virtual ring" o-methoxybenzamides (I; R = H, NO2, or NH2; R1 = H or NH2; R2 = H or Cl) with a series of synthetic closed-ring benzotriazinones (II; R = H, NO2, or NH2; R1 = H or Cl; X = N or CH and III; R = NO2 or NH2) showed that the closed-ring compds. retained 5-HT3 receptor-antagonizing activities. In addition, the structure-activity relationship with regard to substitution of the aromatic ring was similar between the "virtual ring" and the closed-ring compds.

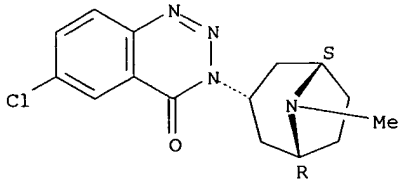
IT **123948-33-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and reduction and serotoninergic S3 receptor antagonism by, structure in relation to)
RN 123948-33-4 CAPLUS
CN 1,2,3-Benzotriazin-4(3H)-one, 6-chloro-3-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-7-nitro-, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



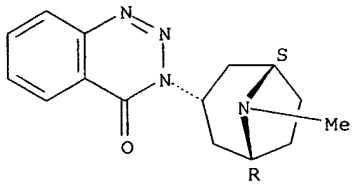
IT **123948-31-2P 123948-32-3P 123948-34-5P**
130669-66-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and serotoninergic S3 receptor antagonism by, structure in relation to)
RN 123948-31-2 CAPLUS
CN 1,2,3-Benzotriazin-4(3H)-one, 6-chloro-3-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 123948-32-3 CAPLUS
CN 1,2,3-Benzotriazin-4(3H)-one, 3-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-, endo- (9CI) (CA INDEX NAME)

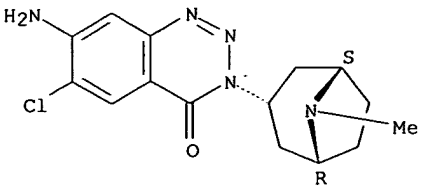
Relative stereochemistry.



RN 123948-34-5 CAPLUS
CN 1,2,3-Benzotriazin-4(3H)-one, 7-amino-6-chloro-3-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-, endo- (9CI) (CA INDEX NAME)

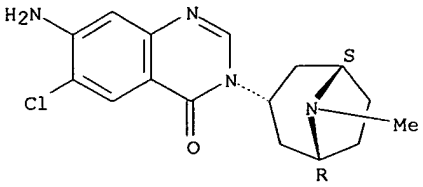
Relative stereochemistry.

10726680

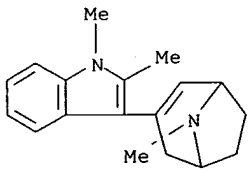


RN 130669-66-8 CAPLUS
CN 4(3H)-Quinazolinone, 7-amino-6-chloro-3-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)-, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L22 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1975:531396 CAPLUS
DN 83:131396
TI 3-Cycloalkenylindoles
AU Freter, Kurt
CS Pharma-Res. Canada Ltd., Pointe Claire, QC, Can.
SO Journal of Organic Chemistry (1975), 40(17), 2525-9
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
OS CASREACT 83:131396
GI For diagram(s), see printed CA Issue.
AB The indoles I (X = CH2, S, NH, PhCH2N, etc.; R, R1 = H, Me; R2 = H, MeO) were prepared by treating II with III.
IT **55556-38-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 55556-38-2 CAPLUS
CN 8-Azabicyclo[3.2.1]oct-2-ene, 3-(1,2-dimethyl-1H-indol-3-yl)-8-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L22 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1958:30044 CAPLUS
DN 52:30044
OREF 52:5428e-i,5429a-c
TI 1-Ethyl-4-(3-tropanyl)-tetrahydro-1H-1,4-benzodiazepine
AU Archer, S.; Lewis, T. R.; Unser, M. J.; Hoppe, J. O.; Lape, H.
CS Sterling-Winthrop Research Inst., Rensselaer, NY
SO Journal of the American Chemical Society (1957), 79, 5783-5
CODEN: JACSAT; ISSN: 0002-7863

10726680

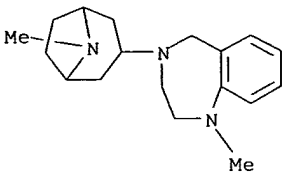
DT Journal
LA Unavailable
OS CASREACT 52:30044
AB 2-Bromoethyl-phthalimide (224 g.) and 222 g. PhNHEt in 550 cc. xylene refluxed 10 hrs., filtered, concentrated in vacuo, refluxed 6 hrs. with 271 cc. concentrated HCl and 45 cc. H2O, cooled, filtered, and basified with aqueous KOH, and the product isolated with C6H6 yielded 58 g. EtPhN(CH2)2NH2 (I), b0.2 97-9°, n25D 1.5625. 2-Bromoethylphthalimide (224 g.) and 196 g. PhNHMe gave similarly 51 g. MePhN(CH2)2NH2 (II), b0.15 100-2°; picrate, m. 174-5° (EtOH). I (41 g.) and 35 g. tropinone (III) in 100 cc. EtOH kept at room temperature overnight and hydrogenated 1 hr. over 0.5 g. PtO2 yielded 54 g. N'-(3-tropanyl) derivative (IV) of I, b0.25 164-5°, n25D 1.5551. III (51.5 g.) and 50.6 g. II gave similarly 65 g. N'-(3-tropanyl) derivative (V) of II, b0.1 169-71°, n25D 1.5595. IV (31.2 g.) treated with cooling with 28.1 g. 98% HCO2H, warmed to room temperature, treated with 10.9 cc. 37% aqueous CH2O, heated 18 hrs. on the steam bath, cooled, poured into ice and H2O, and basified strongly with 35% aqueous NaOH, and the product isolated with Et2O yielded 1-ethyl-4-(3-tropanyl)tetrahydro-1H-1,4-benzodiazepine (VI), b0.7 178-80°, and 7.5 g. nondistillable residue. IV (29. g) heated with 25 cc. concentrated HCl and 8.2 cc. aqueous CH2O gave 2.7 g. VI, b0.04 160-3°. IV (29 g.), 26.5 cc. HCO2H, 10% 37% aqueous CH2O, and 500 cc. H2O kept 16 hrs. at 95°yielded 18.7 g. VI, b0.7 178-83°, and 5.4 g. nondistillable residue. V (47 g.) treated with 42.5 cc. 98% HCO2H and 16.5 cc. aqueous CH2O and heated on the steam bath overnight gave 18.7 g. 1-Me homolog (VII) of VI, b0.7 180-2°. VI (15.5 g.) and 16 g. MeI kept at room temperature overnight and filtered, the residue leached with boiling EtOH to leave VI.2MeI, m. 266-7° (decomposition) (H2O), and the extract cooled gg. tropinone (III) in 100 cc. EtOH kept at room temperature overnight and hydrogenated 1 hr. over 0.5 g. PtO2 yielded 54 g. N'-(3-tropanyl) derivative (IV) of I, b0.25 164-5°, n25D 1.5551. III (51.5 g.) and 50.6 g. II gave similarly 65 g. N'-(3-tropanyl) derivative (V) of II, b0.1 169-71°, n25D 1.5595. IV (31.2 g.) treated with cooling with 28.1 g. 98% HCO2H, warmed to room temperature, treated with 10.9 cc. 37% aqueous CH2O, heated 18 hrs. on the steam bath, cooled, poured into ice and H2O, and basified strongly with 35% aqueous NaOH, and the product isolated with Et2O yielded 1-ethyl-4-(3-tropanyl)tetrahydro-1H-1,4-benzodiazepine (VI), b0.7 178-80°, and 7.5 g. nondistillable residue. IV (29. g) heated with 25 cc. concentrated HCl and 8.2 cc. aqueous CH2O gave 2.7 g. VI, b0.04 160-3°. IV (29 g.), 26.5 cc. HCO2H, 10% 37% aqueous CH2O, and 500 cc. H2O kept 16 hrs. at 95°yielded 18.7 g. VI, b0.7 178-83°, and 5.4 g. nondistillable residue. V (47 g.) treated with 42.5 cc. 98% HCO2H and 16.5 cc. aqueous CH2O and heated on the steam bath overnight gave 18.7 g. 1-Me homolog (VII) of VI, b0.7 180-2°. VI (15.5 g.) and 16 g. MeI kept at room temperature overnight and filtered, the residue leached with boiling EtOH to leave VI.2MeI, m. 266-7° (decomposition) (H2O), and the extract cooled gave 6.0 g. VI.MeI, m. 227-8.5° (decomposition) (EtOH). Electrometric titration of VI.MeI in 0.1N HCl with 0.1N NaOH gave 2 inflection points at pH 3.57 and 6.74. VII (7.5 g.), 8.2 cc. MeI, and 35 cc. absolute EtOH kept a room temperature overnight and filtered, and the residue leached with boiling EtOH left 5.2 g. VII.2MeI, m. 253-3.5° (decomposition) (H2O); electrometric titration showed an inflection point at pH 7.02. Amberlite IRA-400 (50 g.) converted to the OH form, VII.2MeI (8.2 g.) in H2O passed through the resin, the effluent evaporated, the residue distilled, and the distillate treated with picric acid gave the dipicrate, m. 193-4° (EtOH), of 5-(dimethylamino)-3-[N-vinyl-N-(o-dimethylaminobenzyl)amino]cycloheptene. VII (88.2 g.) in 200 cc. PhMe refluxed overnight with 88.2 cc. 98% HCO2H, refluxed overnight, poured into ice H2O, and basified strongly with 35% aqueous NaOH, the aqueous layer extracted with C6H6, and the combined organic layer and extract distilled gave 48 g. N-formyl derivative (VIII) of VII, m. 95-7° (EtOH). IV (20 g.) refluxed overnight with 16.5 cc. HCO2H in 150 cc. PhMe yielded similarly 13.5 g. N'-formyl derivative (IX) of IV, b0.08 197-202°, m. 105-7° (hexane). IX (25 g.) in 100 cc. Et2O reduced with 10 g. Li-AlH4 in 200 cc. Et2O gave 10 g. N'-Me derivative (X) of IX, b1.5 182-7°, n25D 1.5518. X (3.0 g.) and 5 cc. MeI in 20 cc. EtOH refluxed 5 hrs. and filtered hot gave X.2MeI, m. 228.5-30° (decomposition). VIII (24.4 g.) reduced with 10 g. LiAlH4 gave 17.6 g. N'-Me derivative (XI) of VIII, b0.1 165-8°, n25D 1.5560. XI treated with MeBr in EtOH and the product treated in aqueous solution with KI gave XI.2MeI. p-MeC6H4NMe(CH2)2NH2 (XII) (125 g.) and 117 g. III in 400 cc. absolute EtOH kept overnight and then reduced at 1000 lb. and room temperature over 2.0 g. PtO2 yielded 134 g. N'-(3-tropanyl) derivative (XIII) of XII, b0.3 164-7°, n25D 1.5533. XIII (44.3 g.) treated with cooling with 40 cc. 98% HCO2H and then 15.5 cc. aqueous CH2O, heated on the steam bath overnight, and worked up gave 35.2 g. 1,7-dimethyl-4-(3-tropanyl)-tetrahydro-1H-1,4-benzodiazepine, b0.1

180-3°, and 6.0 g. nonvolatile residue.

IT **111499-43-5**, 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1-methyl-4-(3-tropanyl)- **112325-75-4**, 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1-methyl-4-(3-tropanyl)-, dimethiodide **112743-75-6**, 1H-1,4-Benzodiazepine, 1-ethyl-2,3,4,5-tetrahydro-4-(3-tropanyl)- **113223-54-4**, 1H-1,4-Benzodiazepine, 1-ethyl-2,3,4,5-tetrahydro-4-(3-tropanyl)-, methiodides **113223-56-6**, 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1,7-dimethyl-4-(3-tropanyl)-
(preparation of)

RN 111499-43-5 CAPLUS

CN 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1-methyl-4-(3-tropanyl)- (6CI) (CA INDEX NAME)

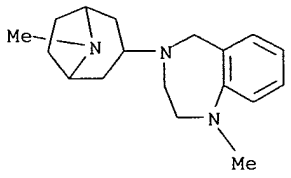


RN 112325-75-4 CAPLUS

CN 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1-methyl-4-(3-tropanyl)-, dimethiodide (6CI) (CA INDEX NAME)

CM 1

CRN 111499-43-5
CMF C18 H27 N3

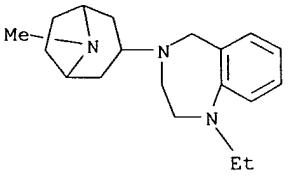


CM 2

CRN 74-88-4
CMF C H3 I

RN 112743-75-6 CAPLUS

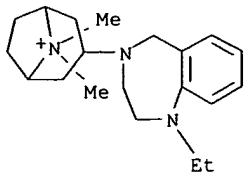
CN 8-Azabicyclo[3.2.1]octane, 3-(1-ethyl-1,2,3,5-tetrahydro-4H-1,4-benzodiazepin-4-yl)-8-methyl- (9CI) (CA INDEX NAME)



RN 113223-54-4 CAPLUS

CN 3-(1-Ethyl-2,3,4,5-tetrahydro-1H-1,4-benzodiazepin-4-yl)-8-methyltropanium

iodide (6CI) (CA INDEX NAME)



RN 113223-56-6 CAPLUS
CN 1H-1,4-Benzodiazepine, 2,3,4,5-tetrahydro-1,7-dimethyl-4-(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)- (9CI) (CA INDEX NAME)